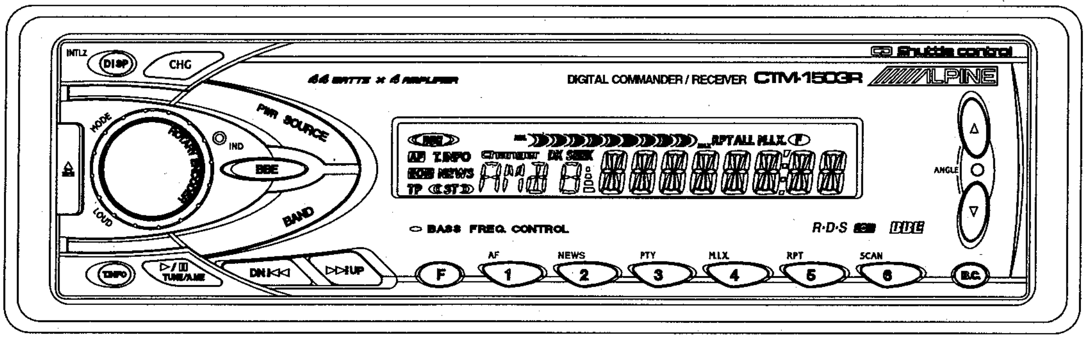
ALPINE

SERVICE MANUAL

Digital Commander/Receiver

● The model described in this manual is developed from Model CDM-7861R.
For information that is not mentioned in this service manual, refer to the Service Manual • CDM-7861R (Part No. 68E31122S01).


CD Shuttle control
44 WATTS x 4 AMPLIFIER
DIGITAL COMMANDER / RECEIVER CTM-1503R
ALPINE
INTL'Z
DISP
CHG
PWR SOURCE
MODE
ROTARY ENCODER
IND
BBE
BAND
LOUD
T.INFO
NEWS
TP
ST
RPT ALL M.I.X.
BASS FREQ. CONTROL
R·D·S
BBE
ANGLE
T.INFO
▷/II TUNE/A.ME
DN
UP
F
AF
1
NEWS
2
PTY
3
M.I.X.
4
RPT
5
SCAN
6
B.C.

CTM-1503R

Contents

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Block Diagram 3
Parts Layout on P.W.Boards and Wiring Diagram .... 4~9
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Terminal Voltage of IC/TR 18, 19
Description of IC Terminal 20, 21
Electrical Parts List .... 22~28
Cabinet Assembly Parts List 29
Exploded View (Cabinet) .... 30~33

Packing Method View
Specifications (Except CD SECTION)
Adjustment Procedures
Adjustment Locations

Refer to the Service Manual • CDM-7861R (Part No. 68E31122S01).

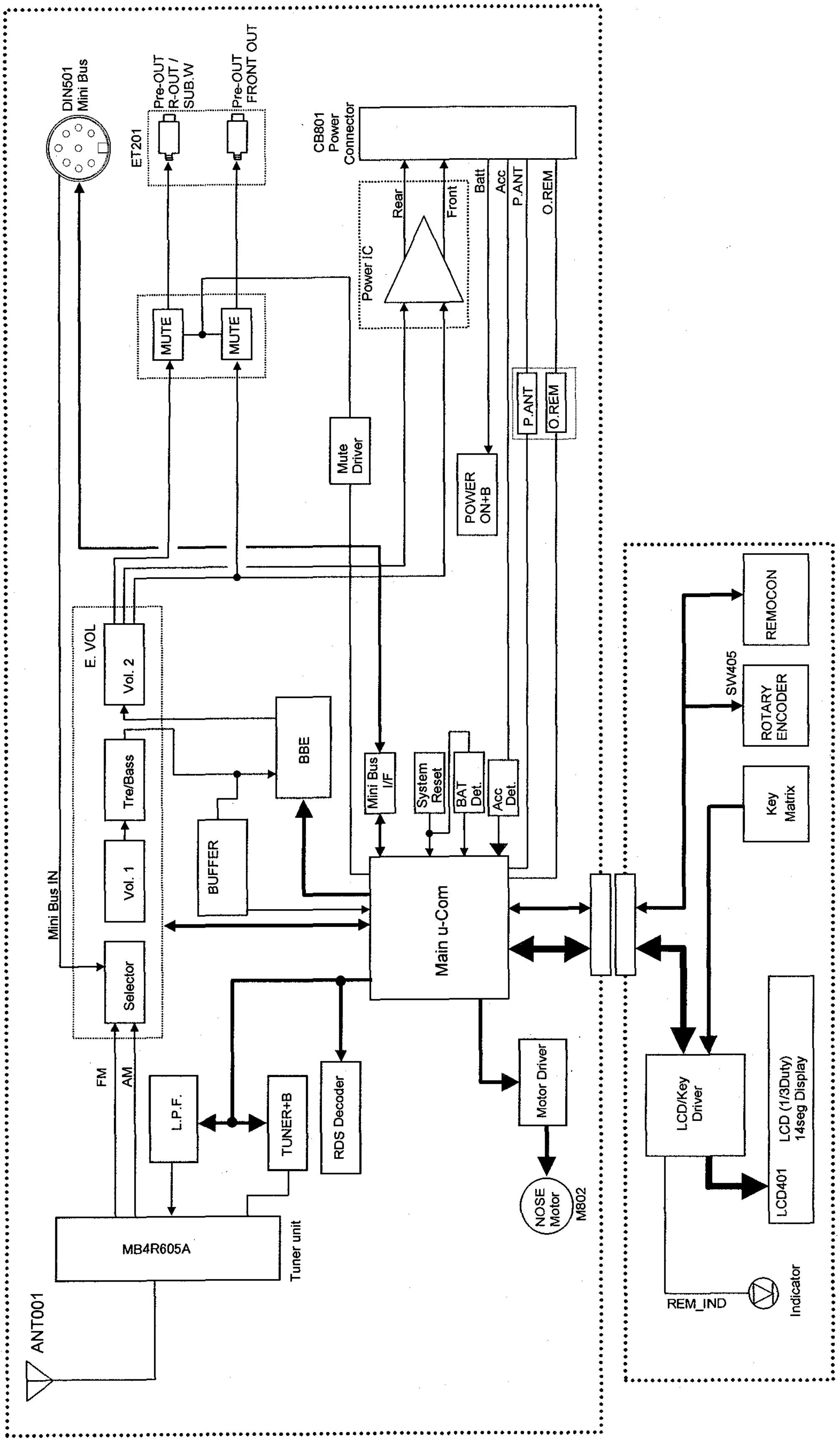
NOTE : Due to continuing product improvement, specifications and designs are subject to change without notice.

Packing Assembly Parts List (Only Difference)

NOTE : For the parts not mentioned, refer to the Service Manual for CDM-7861R (Part No. 68E31122S01).

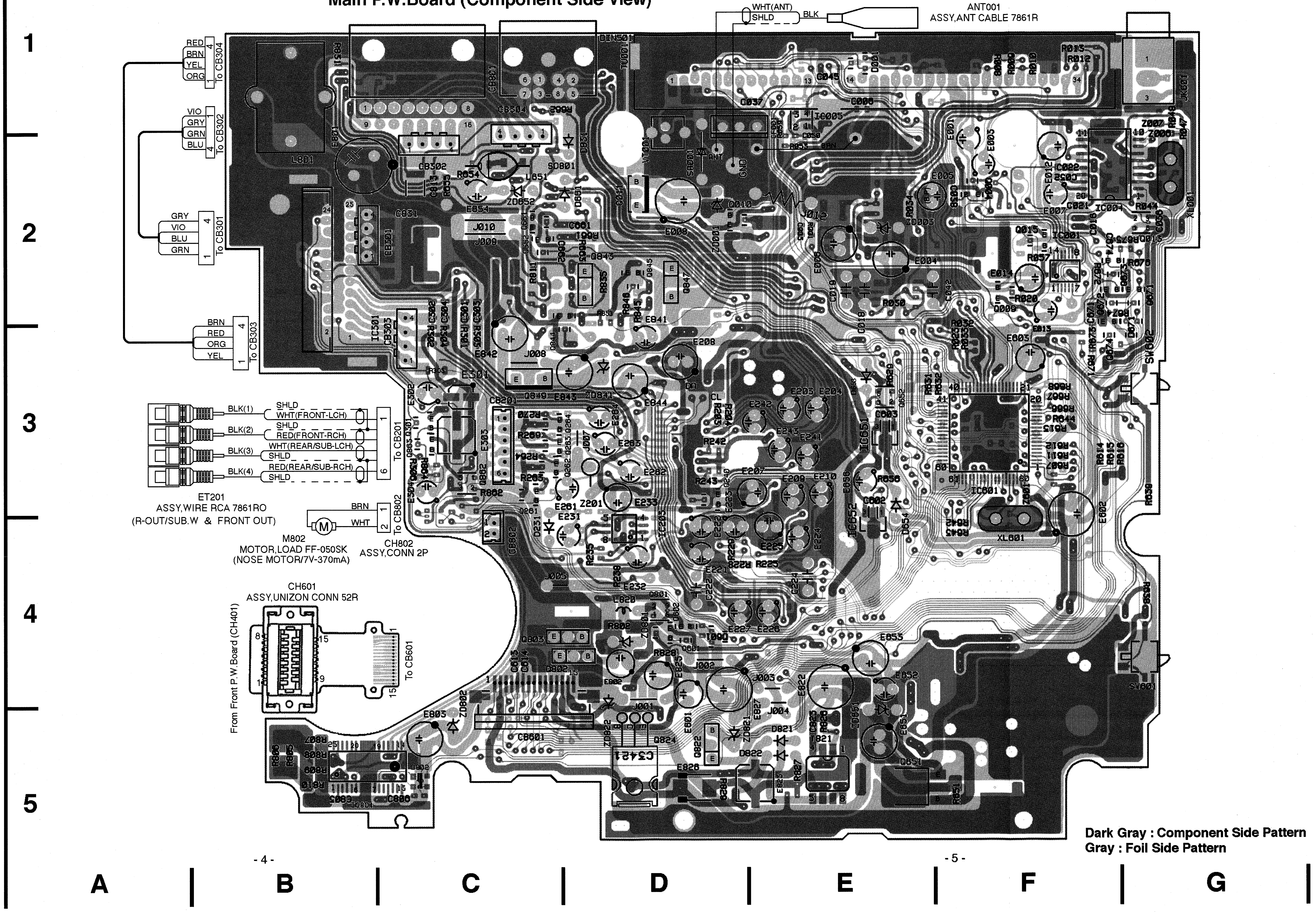
Model	CDM-7861R		CTM-1503R	
Symbol No.	Part No.	Description	Part No.	Description
105	68P01149K63	O/M AOEU AODN	68P01434K12	O/M AOEU AODN

Block Diagram


DIN501
Mini Bus
ET201
Pre-OUT
R-OUT /
SUB.W
Pre-OUT
FRONT OUT
CB801
Power
Connector
Rear
Front
Batt
Acc
P.ANT
O.REM
Power IC
MUTE
MUTE
Mute
Driver
P.ANT
O.REM
POWER
ON+B
E. VOL
Vol. 2
Tre/Bass
Vol. 1
Selector
Mini Bus IN
BBE
BUFFER
Mini Bus
I/F
System
Reset
BAT
Det.
Acc
Det.
Main u-Com
FM
AM
L.P.F.
TUNER+B
RDS Decoder
Motor Driver
NOSE
Motor
M802
MB4R605A
Tuner unit
ANT001
REMOCON
SW405
ROTARY
ENCODER
Key
Matrix
LCD/Key
Driver
LCD (1/3Duty)
14seg Display
LCD401
REM_IND
Indicator

Parts Layout on P.W.Boards and Wiring Diagram (1/3)

Main P.W.Board (Component Side View)

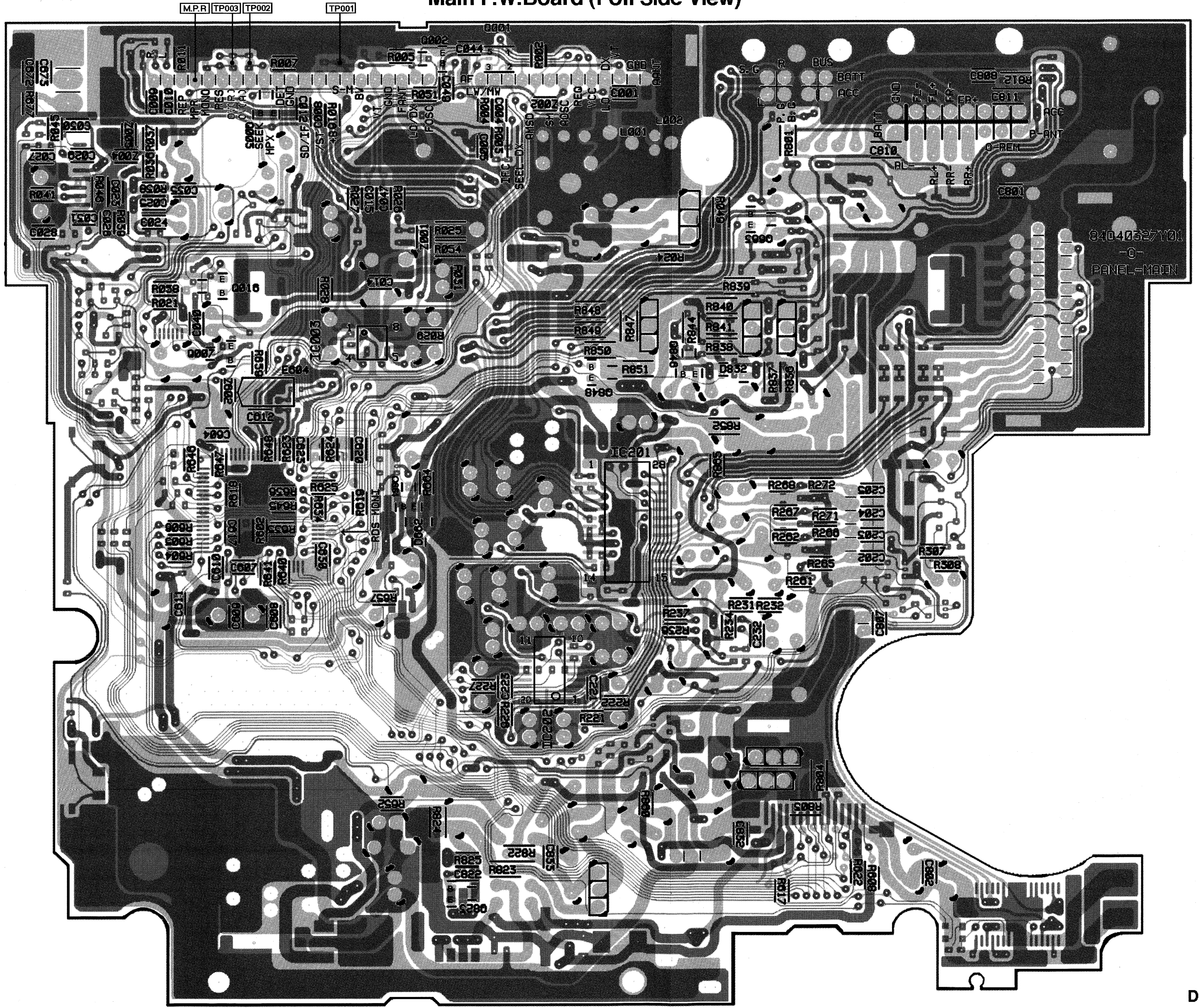

1
2
3
4
5
A
B
C
D
E
F
G
RED
BRN
YEL
ORG
To CB304
VIO
GRY
GRN
BLU
To CB302
GRY
VIO
BLU
GRN
To CB301
BRN
RED
ORG
YEL
To CB303
WHT(ANT)
SHLD
BLK
ANT001
ASSY,ANT CABLE 7861R
BLK(1)
BLK(2)
BLK(3)
BLK(4)
SHLD
WHT(FRONT-LCH)
RED(FRONT-RCH)
WHT(REAR/SUB-LCH)
RED(REAR/SUB-RCH)
To CB201
ET201
ASSY,WIRE RCA 7861RO
(R-OUT/SUB.W & FRONT OUT)
BRN
WHT
M
To CB802
M802
MOTOR,LOAD FF-050SK
(NOSE MOTOR/7V-370mA)
CH802
ASSY,CONN 2P
CH601
ASSY,UNIZON CONN 52R
From Front P.W.Board (CH401)
To CB601
L801
CB801
DIN501
TU001
JK601
IC005
IC004
IC001
IC601
IC501
IC651
IC652
XL601
XL001
SW802
SW801
CB302
CB301
CB303
CB304
CB201
CB802
CB601
E301
E303
E302
E304
C5421

Dark Gray : Component Side Pattern
Gray : Foil Side Pattern

CTM-1503R

Parts Layout on P.W.Boards and Wiring Diagram (2/3)

Main P.W.Board (Foil Side View)


M.P.R
TP003
TP002
TP001
Q001
Q002
C044
R005
R007
R011
R002
GND
AANT
C001
L001
L002
S-M
BV
AF
LW/MW
R051
R004
R003
C007
R006
S-M
AMSD
REQ
VCC
LO
DX
REP
MPR
MONO
RES
SEEK
HPX
DET
SD/IF
V.T.
FANT
FOSC
LO/DX
IFC
SEEK-DX
S.G
R
BUS
BATT
ACC
GND
FL-
FL+
FR-
FR+
C809
R812
C811
C810
C801
R801
P.ANT
R-REM
RL+
RL-
RR-
RR+
84040327Y01
-0-
PANEL-MAIN
R024
R839
R840
R841
R838
R844
R847
R848
R849
R850
R851
Q848
Q832
R852
IC201
IC202
IC003
Q016
Q007
R038
R021
C040
C004
C012
Z002
R025
R054
Q103
Z001
R268
R272
R267
R271
R262
R266
R265
R261
R307
R308
C205
C204
C203
C202
C807
R237
R236
R234
R231
R232
C232
R227
R228
R223
R222
R221
R057
R052
R808
R804
R805
R809
R817
R822
R823
R825
C822
Q823
C802
C011
C010
C007
C008
RDS MONT
1
A
B
C
D
E
F
G
2
3
4
5

Dark Gray : Component Side Pattern
Gray : Foil Side Pattern

Parts Layout on P.W.Boards and Wiring Diagram (3/3)

1

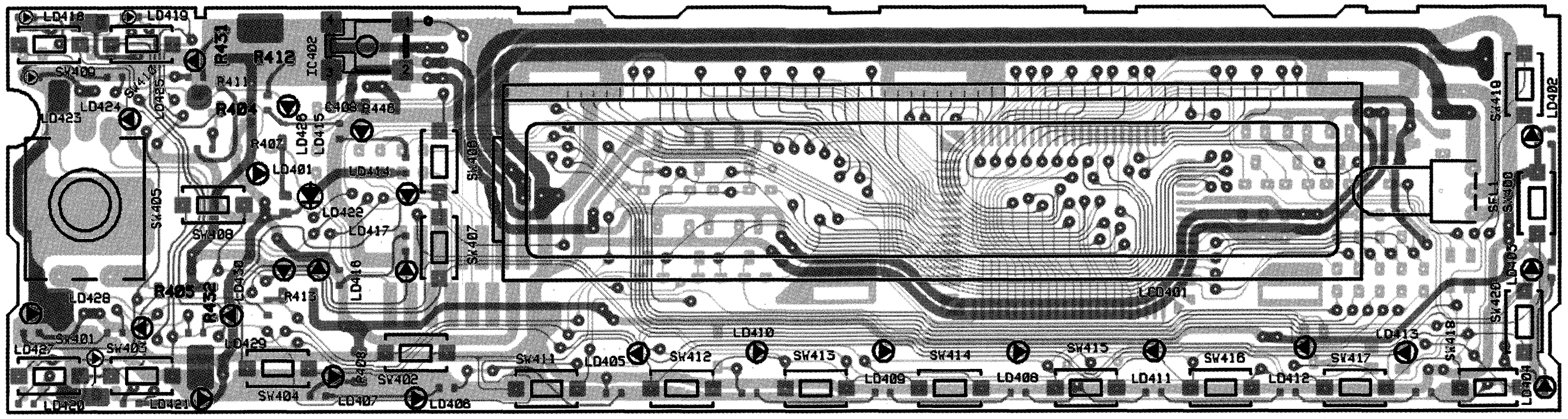
2

3

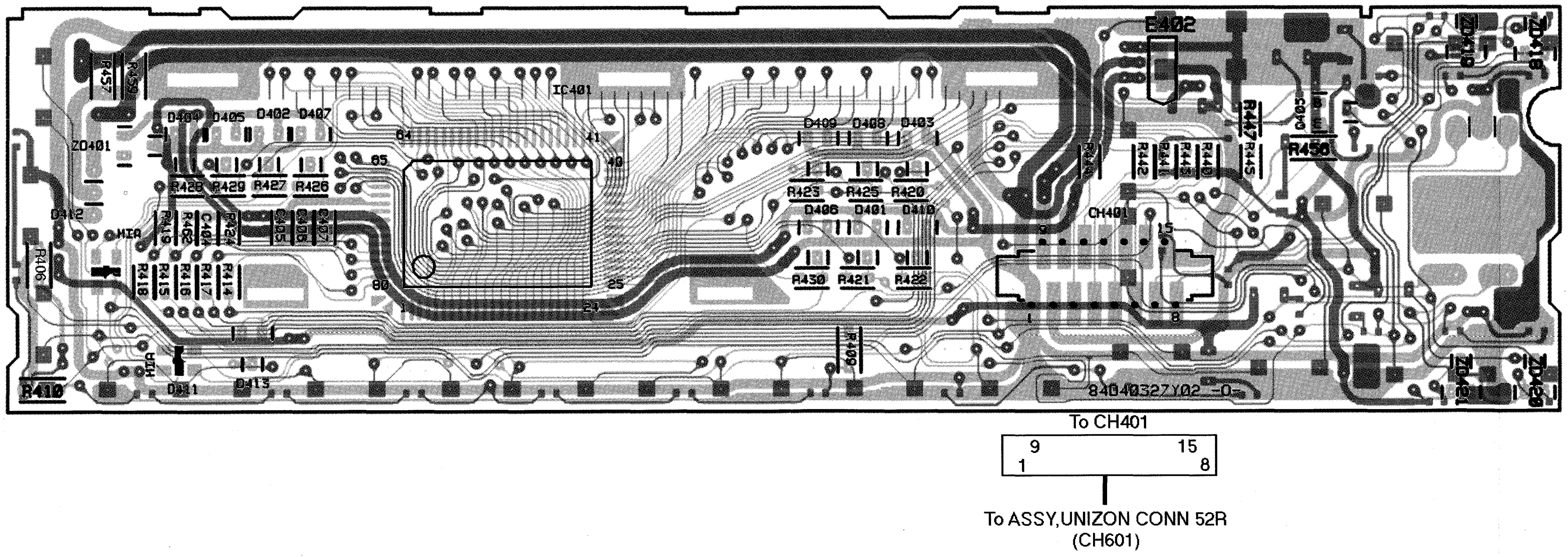
4

5

Front P.W.Board (Component Side View)


LD418
LD419
R431
R412
IC402
SW409
R411
LD424
LD425
LD406
R404
LD426
LD415
C409
R446
R407
LD401
LD414
SW405
SW408
LD422
LD417
SW406
SW407
LD416
R405
R432
LD430
R413
LD428
SW401
LD427
SW403
LD429
R408
SW402
LD420
LD421
SW404
LD407
LD406
SW411
LD405
SW412
LD410
SW413
LD409
SW414
LD408
SW415
LD411
SW416
LD412
SW417
LD413
SW418
LD403
SW420
LD404
SW410
LD402
SW419

Front P.W.Board (Foil Side View)

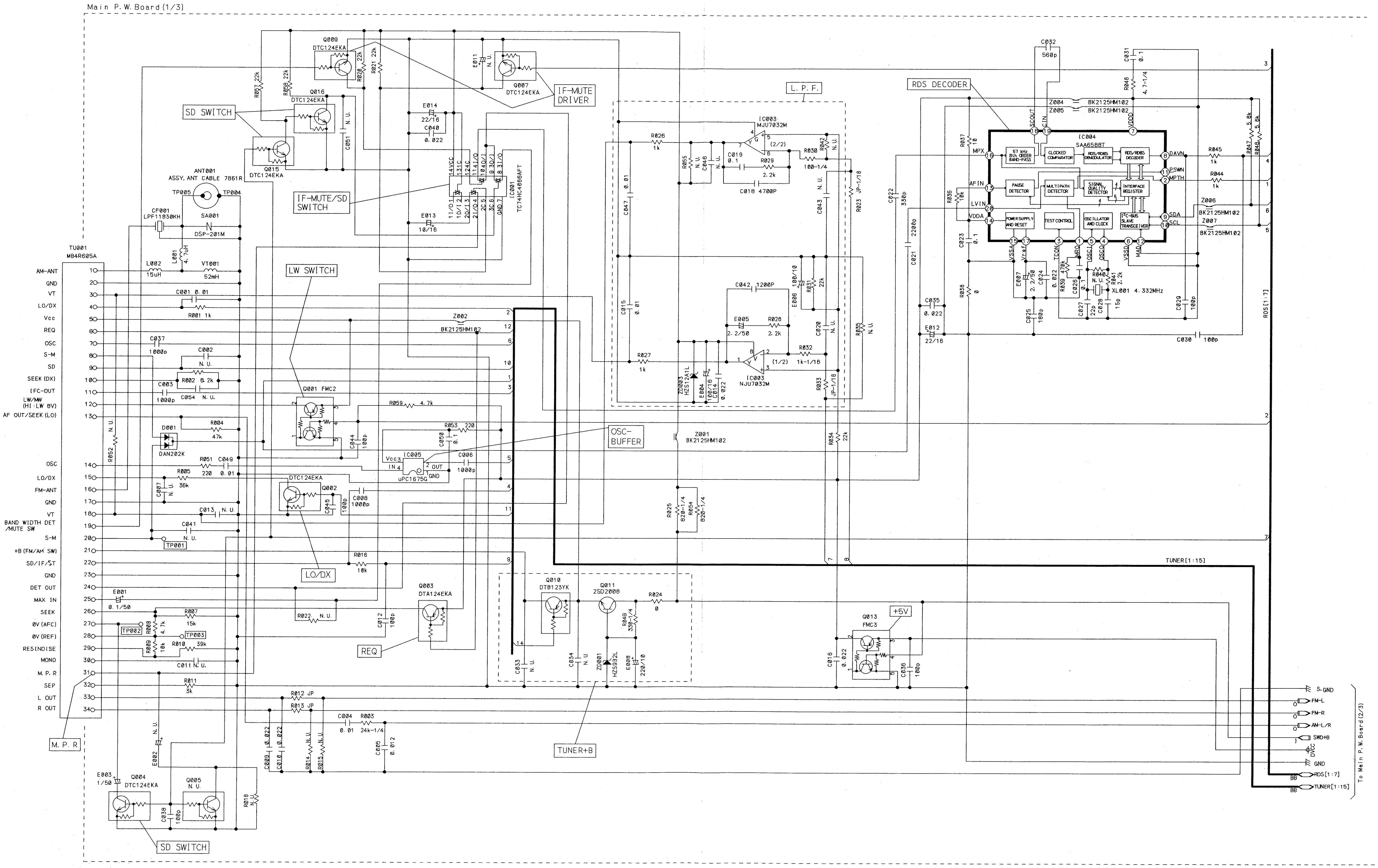

E402
ZD410
ZD418
R457
R452
IC401
D404
D405
D402
D407
ZD401
64
65
41
40
R428
R429
R427
R426
D412
R419
R406
R418
R415
R416
R417
R414
80
25
24
D409
D408
D403
R423
R425
R420
D406
D401
D410
R430
R421
R422
R447
R445
R442
R443
R440
R450
CH401
15
8
R409
R410
D411
D413
ZD420
84040327Y02 -0-
To CH401
9
15
1
8
To ASSY,UNIZON CONN 52R
(CH601)

Dark Gray : Component Side Pattern
Gray : Foil Side Pattern

A | B | C | D | E | F | G

CTM-1503R

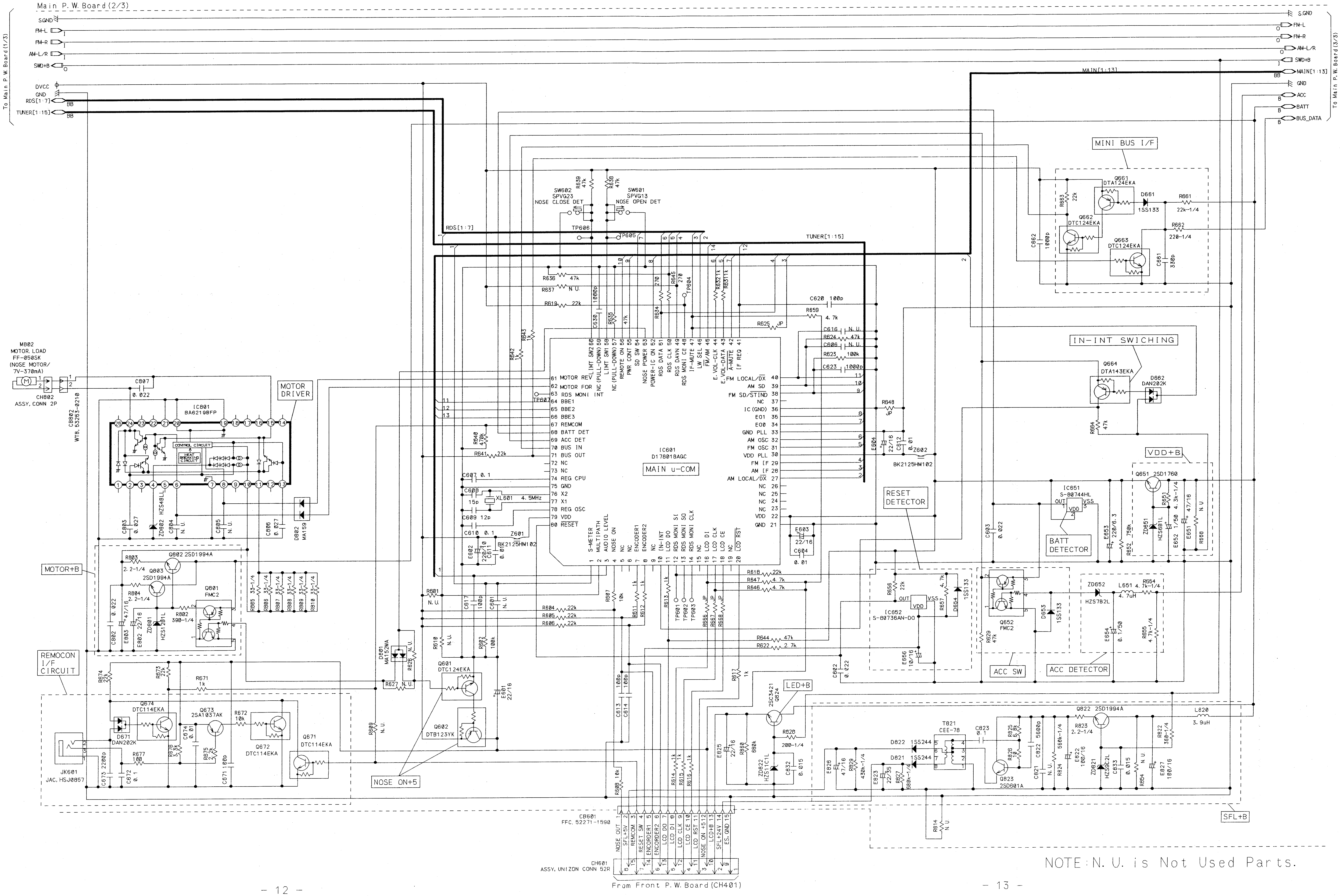
Schematic Diagram (1/4)



Main P.W. Board (1/3)
TU001
MB4R605A
AM-ANT
GND
VT
LO/DX
Vcc
REQ
OSC
S-M
SD
SEEK (DX)
IFC-OUT
LW/MW (HI:LW 0V)
AF OUT/SEEK (LO)
OSC
LO/DX
FM-ANT
GND
VT
BAND WIDTH DET /MUTE SW
S-M
+B (FM/AM SW)
SD/IF/ST
GND
DET OUT
MAX IN
SEEK
0V (AFC)
0V (REF)
RES(NOISE
MONO
M.P.R
SEP
L OUT
R OUT
ANT001
ASSY, ANT CABLE 7861R
TP005
TP004
CF001
LPF11830KH
SA001
DSP-201M
L002 15uH
L001 4.7uH
VT001 52mH
C001 0.01
R001 1k
C037 1000p
C002 N.U.
R002 8.2k
C003 1000p
C054 N.U.
R004 47k
D001 DAN202K
R052 N.U.
R051 220
C049 0.01
R005 36k
C007 N.U.
C013 N.U.
C041 N.U.
TP001
E001 0.1/50
R007 15k
R008 4.7k
TP002
TP003
R009 10k
R010 39k
C011 N.U.
R011 3k
M.P.R
SD SWITCH
Q009 DTC124EKA
R057 22k
R058 22k
R020 22k
R021 22k
Q016 DTC124EKA
Q015 DTC124EKA
C051 N.U.
E014 22/16
C040 0.022
E013 10/16
IC001 TC74HC4066AFT
IF-MUTE/SD SWITCH
E011 N.U.
Q007 DTC124EKA
IF-MUTE DRIVER
LW SWITCH
Q001 FMC2
R059 4.7k
R053 220
C050 0.1
C044 100p
IC005 uPC1675G
C006 1000p
OSC-BUFFER
Z002 BK2125HM102
Q002 DTC124EKA
C045 100p
C008 1000p
LO/DX
R016 10k
R022 N.U.
C012 100p
Q003 DTA124EKA
REQ
L.P.F.
IC003 MJU7032M
R026 1k
R055 N.U.
C048 N.U.
C019 0.1
R029 2.2k
C018 4700P
R030 100-1/4
R042 N.U.
C047 0.01
C043 N.U.
R023 JP-1/16
C042 1200P
E006 100/10
R031 22k
E005 2.2/50
R028 2.2k
C015 0.01
C020 N.U.
R035 N.U.
R027 1k
R032 1k-1/16
ZD003 HZS12A1L
E004 100/16
C014 0.022
IC003 NJU7032M
R033 JP-1/16
Z001 BK2125HM102
R034 22k
R025 820-1/4
R054 820-1/4
Q010 DTB123YK
Q011 2SD2008
R024 0
R049 330-1/4
C033 N.U.
C034 N.U.
ZD001 HZS9.2L
E008 220/10
TUNER+B
Q013 FMC3
+5V
C016 0.022
C036 100p
RDS DECODER
C032 560p
C031 0.1
R048 4.7-1/4
Z004 BK2125HM102
Z005 BK2125HM102
IC004 SAA6580T
57 kHz 8th ORDER BAND-PASS
CLOCKED COMPARATOR
RDS/RBDS DEMODULATOR
RDS/RBDS DECODER
PAUSE DETECTOR
MULTIPATH DETECTOR
SIGNAL QUALITY DETECTOR
INTERFACE REGISTER
POWER SUPPLY AND RESET
TEST CONTROL
OSCILLATOR AND CLOCK
I²C-BUS SLAVE TRANSCEIVER
MPX
AFIN
LVIN
VDDA
VSSA
Vref
TCON
MRO
OSCI
OSCO
VSSD
MAD
SDA
SCL
DAVN
PSWN
MPTH
SCOUT
CIN
VDDD
R037 10
R036 10k
C022 330p
C021 2200p
C023 0.1
R038 0
C035 0.022
E012 22/16
E007 2.2/50
C024 0.022
R039 470k
C026 0.1
R040 N.U.
R041 2.2k
XL001 4.332MHz
C025 180p
C027 22p
C028 15p
C029 100p
C030 100p
R045 1k
R044 1k
R047 5.6k
R046 5.6k
Z006 BK2125HM102
Z007 BK2125HM102
RDS[1:7]
TUNER[1:15]
Q004 DTC124EKA
Q005 N.U.
E003 1/50
E002 N.U.
C038 100p
R018 N.U.
SD SWITCH
R012 JP
R013 JP
C004 0.01
R003 24k-1/4
C009 0.022
C010 0.022
R014 N.U.
R015 N.U.
C005 0.012
S.GND
FM-L
FM-R
AM-L/R
SWD+B
DVCC
GND
RDS[1:7]
TUNER[1:15]
To Main P.W.Board (2/3)

NOTE:N.U. is Not Used Parts.

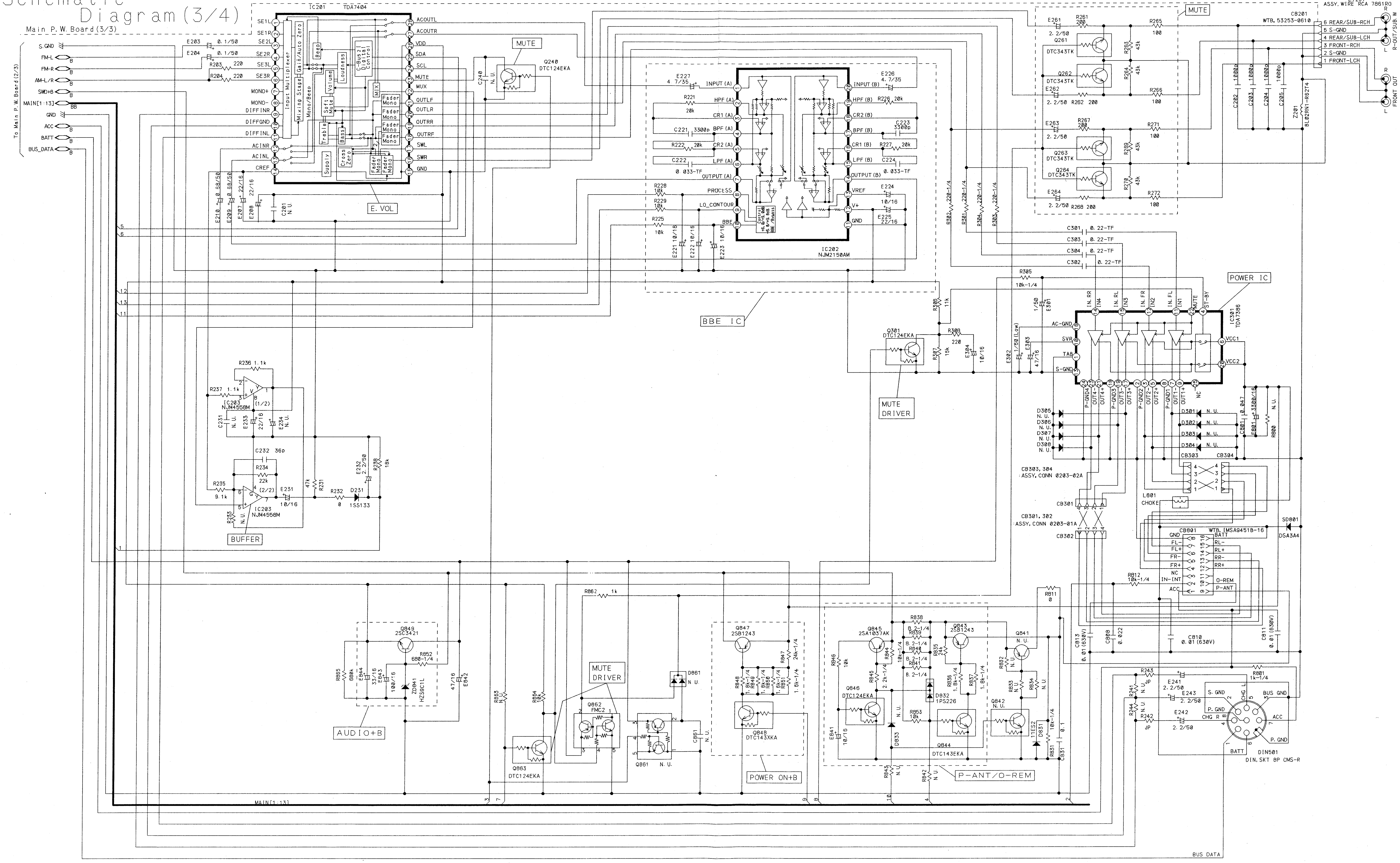
Schematic Diagram (2/4)


Main P. W. Board (2/3)
To Main P. W. Board (1/3)
To Main P. W. Board (3/3)
S.GND
FM-L
FM-R
AM-L/R
SWD+B
DVCC
GND
RDS[1:7]
TUNER[1:15]
MAIN[1:13]
ACC
BATT
BUS_DATA
MINI BUS I/F
IN-INT SWICHING
VDD+B
RESET DETECTOR
BATT DETECTOR
ACC SW
ACC DETECTOR
MOTOR DRIVER
MOTOR+B
REMOCON I/F CIRCUIT
NOSE ON+5
LED+B
SFL+B
M802 MOTOR LOAD FF-050SK (NOSE MOTOR/ 7V-370mA)
CH802 ASSY. CONN 2P
CB802 WTB. 53263-0210
IC801 BA6219BFP
IC601 D17801BAGC
MAIN u-COM
IC651 S-80744HL
IC652 S-80736AN-DO
SW602 SPVG23 NOSE CLOSE DET
SW601 SPVG13 NOSE OPEN DET
XL601 4.5MHz
Z601 BK2125HM102
Z602 BK2125HM102
Q661 DTA124EKA
Q662 DTC124EKA
Q663 DTC124EKA
Q664 DTA143EKA
Q651 2SD1760
Q652 FMC2
Q601 DTC124EKA
Q602 DTB123YK
Q674 DTC114EKA
Q673 2SA1037AK
Q672 DTC114EKA
Q671 DTC114EKA
Q802 2SD1994A
Q803 2SD1994A
Q801 FMC2
Q824 2SC3421
Q822 2SD1994A
Q823 2SD601A
T821 CEE-78
D822 1SS244
D821 1SS244
D661 1SS133
D662 DAN202K
D671 DAN202K
D601 MA152WA
D802 MA159
JK601 JAC. HSJ0857
CB601 FFC. 52271-1590
CH601 ASSY. UNIZON CONN 52R
From Front P. W. Board (CH401)
NOSE OUT
SFL+5V
REMCOM
RESET SW
ENCODER1
ENCODER2
LCD DO
LCD DI
LCD CLK
LCD CE
LCD RST
NOSE ON +5
LCD+B
SFL+24V
ES.GND

NOTE : N. U. is Not Used Parts.

CTM-1503R
Schematic Diagram (3/4)

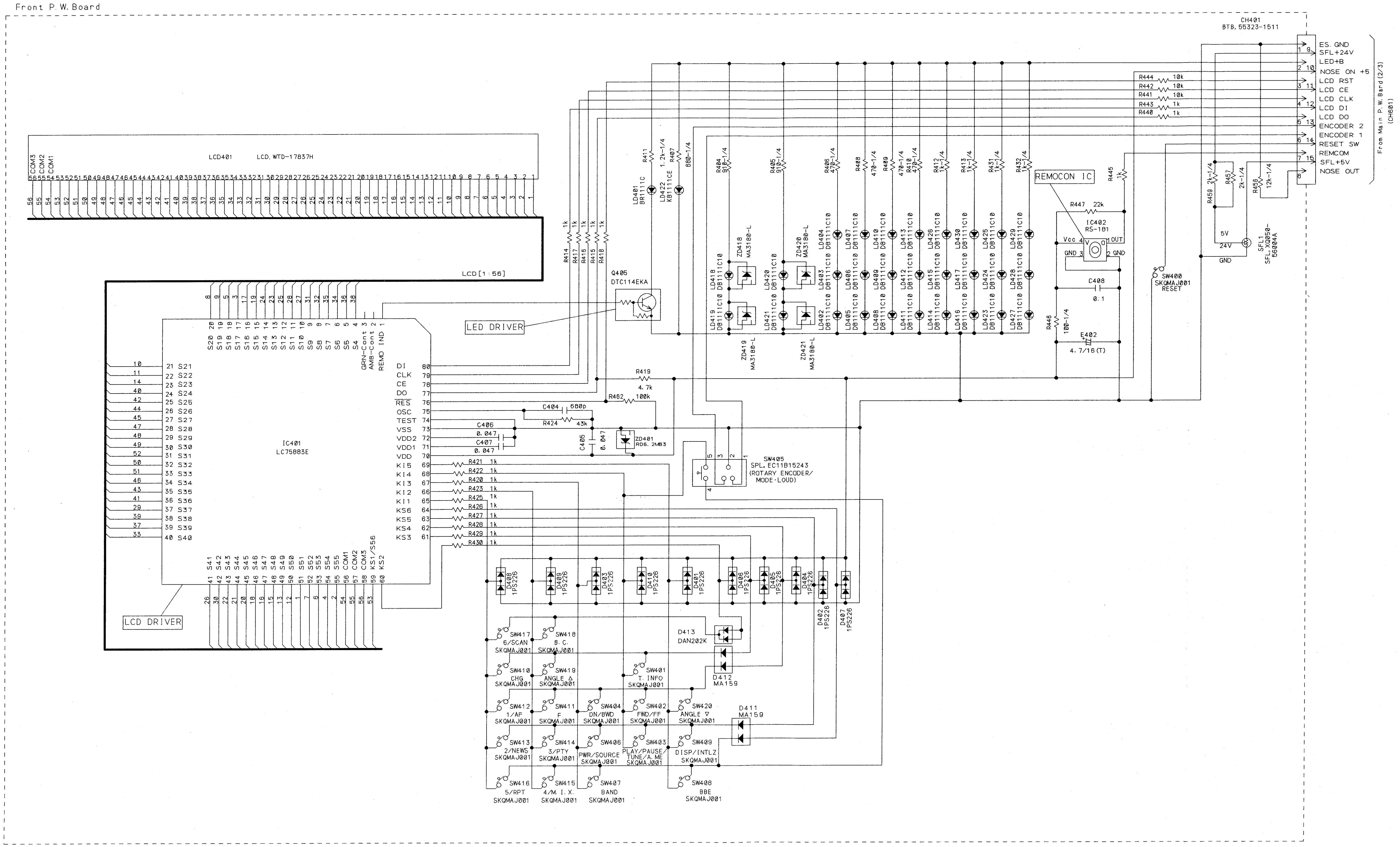
Main P.W. Board (3/3)



To Main P.W. Board (2/3)
S.GND
FM-L
FM-R
AM-L/R
SWD+B
MAIN[1:13]
GND
ACC
BATT
BUS_DATA
IC201 TDA7404
Input Multiplexer
Mixing Stage
Mono/Beep
Gain/Auto Zero
Volume
Loudness
Soft Mute
Treble
Bass
Supply
Cross Zero
Beep
I²C-Bus Digital Control
MIX
Fader Mono
E. VOL
MUTE
Q240 DTC124EKA
C240 N.U.
IC202 NJM2150AM
BBE IC
Control
IC203 NJM4558M
BUFFER
R236 1.1k
R237 1.1k
C232 36p
R234 22k
R235 9.1k
E231 10/16
R232 0
D231 1SS133
MUTE
Q261 DTC343TK
Q262 DTC343TK
Q263 DTC343TK
Q264 DTC343TK
CB201 WTB.53253-0610
ET201 ASSY.WIRE RCA 7861R0
6 REAR/SUB-RCH
5 S-GND
4 REAR/SUB-LCH
3 FRONT-RCH
2 S-GND
1 FRONT-LCH
R-OUT/SUB.W
FRONT OUT
Z201 BL02RN1-R62T4
POWER IC
IC301 TDA7386
Q301 DTC124EKA
MUTE DRIVER
CB303, 304 ASSY.CONN 0203-02A
CB301, 302 ASSY.CONN 0203-01A
L801 CHOKE
SD801 DSA3A4
CB801 WTB.IMSA9451B-16
Q849 2SC3421
ZD841 HZS8C1L
AUDIO+B
MUTE DRIVER
Q862 FMC2
Q863 DTC124EKA
Q861 N.U.
D861 N.U.
Q847 2SB1243
Q848 DTC143XKA
POWER ON+B
Q845 2SA1037AK
Q843 2SB1243
Q841 N.U.
Q846 DTC124EKA
D832 1PS226
Q844 DTC143EKA
Q842 N.U.
P-ANT/O-REM
DIN501 DIN.SKT 8P CMS-R
BUS DATA

NOTE: N.U. is Not Used Parts.

Schematic Diagram (4/4)


Front P.W. Board
LCD401 LCD. WTD-17837H
COM3
COM2
COM1
LCD[1:56]
IC401
LC75883E
LCD DRIVER
LED DRIVER
Q405
DTC114EKA
REMOCON IC
IC402
RS-181
Vcc
OUT
GND
C408
0.1
R446
100-1/4
E402
4.7/16(T)
R447 22k
R445 1k
CH401
BTB, 55323-1511
ES. GND
SFL+24V
LED+B
NOSE ON +5
LCD RST
LCD CE
LCD CLK
LCD DI
LCD DO
ENCODER 2
ENCODER 1
RESET SW
REMCOM
SFL+5V
NOSE OUT
From Main P.W. Bard (2/3)
(CH601)
R444 10k
R442 10k
R441 10k
R443 1k
R440 1k
R459 2k-1/4
R457 2k-1/4
R458 12k-1/4
5V
24V
GND
SFL
SFL.XG050-56004A
SW400
SKQMAJ001
RESET
LD401
BR1111C
LD422
KB1111CE
R411 1.2k-1/4
R407 680-1/4
R404 910-1/4
R405 910-1/4
R406 470-1/4
R408 470-1/4
R409 470-1/4
R410 470-1/4
R412 1k-1/4
R413 1k-1/4
R431 1k-1/4
R432 1k-1/4
ZD418 MA3180-L
ZD419 MA3180-L
ZD420 MA3180-L
ZD421 MA3180-L
DB1111C10
R414 1k
R417 1k
R416 1k
R415 1k
R418 1k
R419 4.7k
R462 100k
C404 680p
R424 43k
C406 0.047
C407 0.047
C405 0.047
ZD401
RD6.2MB3
DI
CLK
CE
DO
RES
OSC
TEST
VSS
VDD2
VDD1
VDD
KI5
KI4
KI3
KI2
KI1
KS6
KS5
KS4
KS3
GRN-Cont
AMB-Cont
REMO IND
R421 1k
R422 1k
R420 1k
R423 1k
R425 1k
R426 1k
R427 1k
R428 1k
R429 1k
R430 1k
SW405
SPL.EC11B15243
(ROTARY ENCODER/
MODE·LOUD)
D408 1PS226
D409 1PS226
D403 1PS226
D410 1PS226
D401 1PS226
D406 1PS226
D405 1PS226
D404 1PS226
D402 1PS226
D407 1PS226
D413
DAN202K
D412
MA159
D411
MA159
SW417 6/SCAN SKQMAJ001
SW418 B.C. SKQMAJ001
SW410 CHG SKQMAJ001
SW419 ANGLE △ SKQMAJ001
SW401 T.INFO SKQMAJ001
SW412 1/AF SKQMAJ001
SW411 F SKQMAJ001
SW404 DN/BWD SKQMAJ001
SW402 FWD/FF SKQMAJ001
SW420 ANGLE ▽ SKQMAJ001
SW413 2/NEWS SKQMAJ001
SW414 3/PTY SKQMAJ001
SW406 PWR/SOURCE SKQMAJ001
SW403 PLAY/PAUSE/ TUNE/A.ME SKQMAJ001
SW409 DISP/INTLZ SKQMAJ001
SW416 5/RPT SKQMAJ001
SW415 4/M.I.X. SKQMAJ001
SW407 BAND SKQMAJ001
SW408 BBE SKQMAJ001

Terminal Voltage of IC/TR

IC001

1, 2	NC
3, 4	1.8V
5, 6	11.8V
7	0V
8~11	3.3V
12, 13	11.8V
14	12.1V

IC003

1	2.9V	FM 98.1MHz
2, 3	2.5V	
4	0V	
5, 6	2.5V	
7	3.9V	
8	12V	

IC004

1	0.2V	12	0V
2	0.3V	13	2.5V
3	0V	14	4.9V
4	2.3V	15	0V
5	1.5V	16	2.3V
6	0V	17	2.4V
7, 8	5V	18	2.5V
9, 10	PS	19	2.2V
11	NC	20	2.4V

IC005

1	0V
2	PS
3	3.4V
4	PS

IC201

1, 2	NC
3~6	4.4V
7, 8	NC
9~14	4.4V
15	0V
16~22	4.4V
23	5V
24, 25	0V
26	8.8V
27, 28	4.4V

IC202

1~7	4.5V
8	0V
9, 10	4.8V
11	0V
12	8.8V
13~20	4.5V

IC203

1~3	4.5V
4	0V
5~7	4.5V
8	8.8V

IC301

1, 2	0V	14~16	7.2V
3	7.3V	17	7.3V
4	5.1V	18	0V
5	7.3V	19	7.3V
6	14.4V	20	14.4V
7	7.3V	21	7.3V
8	0V	22	5.1V
9, 10	7.3V	23	7.3V
11, 12	7.2V	24	0V
13	0V	25	NC

IC601

1	4.4V	FM 98.1MHz 60dBμ	39	0V	
2	0.3V		40, 41	5.1V/ 0V	Only FM LOCAL SEEK
3	0.8V	FM 98.1MHz 60dBμ	42	5V	
4	2.5V		43, 44	0V	
5, 6	NC		45	8.5V/ 0V	Only AM
7, 8	0V / 5V	ENCODER	46, 47	0V	
9	NC		48, 49	5.1V	
10	0V		50, 51	PS	
11	5V		52~56	5.1V	
12	0V		57	0V	
13~15	NC		58	0V / 5.1V	Full Open / Others
16~18	PS		59	0V	
19	NC		60	0V/ 5.1V	Full Close / Others
20	5.1V		61, 62	0V	
21	0V		63	NC	
22	5.1V		64	5.1V	BBE 2
23~26	NC		65	0V	BBE 2
27	5.1V	Only AM LOCAL SEEK	66	5.1V	BBE 2
28	2.1V		67	4.8V	
29	2.5V		68, 69	4.9V	
30	5.1V		70, 71	PS	
31	2.1V	FM	72, 73	NC	
32	1.4V	AM	74	3.6V	
33	0V		75	0V	
34	2.4V		76, 77	PS	
35, 36	0V		78	3.6V	
37	NC		79, 80	5.1V	
38	4.3V / 0V	FM MONO / STEREO			

IC401

1	5.1V
2, 3	NC
4~59	PS
60~64	5.3V
65~69	0V
70	5.3V
71	3.6V
72	1.9V
73, 74	0V
75	PS
76	4.7V
77	5.3V
78~80	PS

IC402

1	4.2V
2, 3	0V
4	5.2V

IC651

1	5.2V
2	4.9V
3	0V

IC652

1, 2	5.1V
3	0V

IC801

1	NC	13	0V
2	0V	14	NC
3	NC	15	0V
4	3.4V	16~18	NC
5	NC	19~21	0V
6~8	0V	22, 23	NC
9	NC	24	0V
10, 11	10.5V	25	NC
12	NC		

	E	C	B	MODE
Q002	0V	0V / 4.3V	5.1V / 0V	FM LOCAL SEEK / Others
Q003	5.1V	3.3V / 5.1V	5.1V / 0V	SEEK / Others
Q004	0V	0V	5V	
Q007	0V	12V	0V	
Q009	0V	11.7V	0V	
Q010	8.6V	8.5V / 0V	0.2V / 8.6V	FM / AM
Q011	8.6V	14.3V	9.2V	
Q015	0V	0V	5.1V	
Q016	0V	11.7V	0V	
Q240	0V	4.9V	0V	
Q261	0V	0V	14.3V/ 0V	MUTE / Others
Q262	0V	0V	14.3V / 0V	MUTE / Others
Q263	0V	0V	14.3V / 0V	MUTE / Others
Q264	0V	0V	14.3V / 0V	MUTE / Others
Q301	0V	5.1V / 0V	0V / 4.7V	MUTE / Others
Q405	0V	0.1V	5V	
Q601	0V	0.1V	5.1V	
Q602	5.2V	5.2V	0.1V	
Q651	5.2V	14.3V	5.7V	
Q661	5.2V	PS	PS	

	E	C	B	MODE
Q662	0V	PS	PS	
Q663	0V	PS	PS	
Q664	5V	5V / 0V	2.8V / 5V	INTERRUPT / Others
Q671	0V	0V	2.9V	
Q672	0V	0V	0V	
Q673	5.1V	0V	5.1V	
Q674	0V	4.8V	0V	
Q802	11.5V	14.4V	12.1V	
Q803	11.5V	14.4V	12.1V	
Q822	9.2V	14.3V	9.8V	
Q823	PS	9V	PS	
Q824	11.4V	14.3V	12V	
Q843	14.3V	14.3V	13.6V	
Q844	0V	0V	4.8V	
Q845	14.4V	0V	14.4V	
Q846	0V	14.3V	0V	
Q847	14.4V	14.4V	13.7V	
Q848	0V	0.1V	5.1V	
Q849	8.9V	14.4V	9.5V	
Q863	0V	0V / 4.7V	5.1V / 0V	MUTE / Others

	1	2	3	4	5	MODE
Q001	NC	8.3V / 0V	8.3V	5V / 0V	0V	LW / Others
Q013	NC	5.2V	5.2V	14.3V	0V	
Q652	NC	4.9V	4.9V	5.8V	0V	
Q801	NC	14.3V	14.4V	5.1V	0V	
Q862	NC	0V / 14.3V	14.4V	0V / 4.6V	0V	MUTE / Others

[Measuring Conditions]

- Power Supply Voltage : DC14.4V
- Measuring Meter : Digital Multi Voltmeter
- Measuring Point Reference : Between GND
- Measuring Conditions : FM : 98.1MHz
  AM : 999KHz

Description of IC Terminal

D178018AGC : IC601

No.	Symbol	I/O	Terminal Description
1	S-METER	I	Signal Meter input terminal.
2	MULTIPATH	I	Multipath rejection detect terminal of receiving station.
3	AUDIO LEVEL	I	Audio Level signal input terminal.
4	NOSE ON	I	Front Panel detect signal input terminal.
5	NC	—	No connect terminal.
6			
7	ENCODER1	I	Encoder Data input terminal.
8	ENCODER2		
9	NC	—	No connect terminal.
10	IN-INT	I	Outer audio signal input terminal.
11	LCD DO	I	Serial Data signal input terminal from LCD Driver (LC75883E).
12	RDS MONI SI	I	Serial Data input terminal for RDS Monitor.
13	RDS MONI SO	O	Serial Data output terminal for RDS Monitor.
14	RDS MONI CLK	O	Serial Clock output terminal for RDS Monitor.
15	NC	—	No connect terminal.
16	LCD DI	O	Serial Data signal output terminal to LCD Driver (LC75883E).
17	LCD CLK	O	Serial Clock signal output terminal to LCD Driver (LC75883E).
18	LCD CE	O	Chip Enable signal output terminal to LCD Driver (LC75883E).
19	NC	—	No connect terminal.
20	$\overline{\text{LCD RST}}$	O	Reset signal output terminal to LCD Driver (LC75883E).
21	GND	—	GND connect terminal.
22	V_{DD}	—	V_{DD} connect terminal.
23	NC	—	No connect terminal.
≀			
26			
27	AM LOCAL / $\overline{\text{DX}}$	O	LOCAL/DX SEEK sensitivity switching terminal. (H : only valid at LOCAL SEEK ... usually receiving is L.)
28	AM IF	I	AM IF signal input terminal. (only selection at tuning AM)
29	FM IF	I	FM IF signal input terminal. (only selection at tuning FM)
30	V_{DD} PLL	—	V_{DD} connect terminal. (for PLL +B)
31	FM OSC	I	FM OSC signal input terminal.
32	AM OSC	I	AM OSC signal input terminal.
33	GND PLL	—	GND connect terminal. (for PLL GND)
34	EO 0	O	Charge pump output terminal of PLL Synthesizer.
35	EO 1		
36	IC (GND)	—	GND connect terminal.
37	NC	—	No connect terminal.
38	FM SD / $\overline{\text{ST IND}}$	I	Receiving FM : ST signal input terminal. (L : receiving ST station) Tuning FM : FM SD signal input terminal. (H : SD ON)
39	AM SD	I	AM SD signal input terminal.

No.	Symbol	I/O	Terminal Description
40	FM LOCAL / $\overline{\text{DX}}$	O	LOCAL/DX SEEK sensitivity switching terminal. (L : only valid at DX SEEK...usually receiving is L.)
41	IF REQ	O	IF output control terminal. H : FM/AM SEEK, L : receiving
42	$\overline{\text{A-MUTE}}$	O	Audio Mute signal output terminal. L : Mute ON
43	E.VOL-DATA	O	Serial Data output terminal to E.VOL (TDA7404).
44	E.VOL-CLK	O	Serial Clock output terminal to E.VOL (TDA7404).
45	$\overline{\text{FM}}$ / AM	O	FM / AM power switching signal output terminal. L : FM
46	LW SEL	O	LPF switching terminal at LW. H : LW
47	IF-MUTE	O	IF Mute output terminal.
48	RDS MONI CE	I/O	Chip Enable output terminal for RDS Monitor.
49	RDS DAVN	I	RDS Data available input terminal.
50	RDS CLK	O	RDS Clock output terminal to RDS Decoder (SAA6588T).
51	RDS DATA	I/O	RDS Data input/output terminal to RDS Decoder (SAA6588T).
52	POWER-IC ON	O	STBY CONT signal output terminal of Power IC.
53	NOSE POWER	O	Power control signal output terminal for LCD Driver and Remocon.
54	SD SW	O	TIME constant switching terminal for high speed PLL part at AF check etc.
55	PWR CONT	O	Power control signal output terminal for Audio and Key lighting.
56	REMOTE ON	O	Remote ON signal output terminal for outer Amp.
57	NC(PULL-DOWN)	—	Pull-down connect terminal.
58	LIMT SW1	I	Active NOSE position detect signal input terminal.
59	NC(PULL-DOWN)	—	Pull-down connect terminal.
60	LIMT SW2	I	Active NOSE position detect signal input terminal.
61	MOTOR REV	O	Active NOSE open / close motor control signal output terminal.
62	MOTOR FOR		
63	RDS MONI INT	O	1 Byte Communication END output terminal for RDS Monitor.
64	BBE1	O	BBE control output terminal.
65	BBE2		
66	BBE3		
67	REMCOM	I	Remocon Data input terminal.
68	BATT DET	I	BATT detect signal input terminal. Management compulsion Stand-by .
69	ACC DET	I	ACC (IGNITION) detect signal input terminal.
70	BUS IN	I	Signal input terminal from CD Changer BUS I/F.
71	BUS OUT	O	Signal output terminal to CD Changer BUS I/F.
72	NC	—	No connect terminal.
73			
74	REG CPU	—	GND connect terminal (0.1μF). (for CPU+B regulator)
75	GND	—	GND connect terminal.
76	X2	O	System Clock OSC circuit output terminal. (4.5MHz)
77	X1	I	System Clock OSC circuit input terminal. (4.5MHz)
78	REG OSC	—	GND connect terminal (0.1μF). (for OSC circuit regulator)
79	V_{DD}	—	V_{DD} connect terminal.
80	$\overline{\text{RESET}}$	I	System reset signal input terminal.

Electrical Parts List

Capacitor : μF=microfarads,pF=picofarads

Abbreviations

RES.= Resistor
C.F.= Carbon Film
M.F.= Metal Film
M.O.= Metal OxideFilm
M.P.= Metal Plate
TR. = Transistor
TRANS.= Transformer
CP. = Chip

CAP.= Capacitor
ELY.= Electrolytic
CER.= Ceramic
MYL.= Mylar
TAN.= Tantalum
POLY.= Polystyrol
PP. = Polypropylene
PLT.= Polyethylene
PF. = Polyester Film

Symbol No.	Part No.	Description
Main P.W.Board		
IC's		
IC001	51T15456Y01	TC74HC4066AFT-EL-SE5
IC003	51T65421W02	NJU7032M-TE3 -SE2
IC004	51T15132Y02	SAA6588T -SE9
IC005	51T96030F01	IC ,UPC1675G-T1
IC201	51T35261Y01	TDA7404 -SE9
IC202	51T15468Y01	NJM2150AM-TE1 -SE6
IC203	51T93336F01	IC,NJM4558M-TE3 -SE2
IC301	51T15021Y01	TDA7386 -ZS
IC601	51T45050Y01	IC,D178018AGC-XXX-QT
IC651	51T95563W01	S-80744HL-T1 -NE2
IC652	51T45214W03	S-80736AN-D0-T1 -NE2
IC801	51T25448Y01	BA6219BFP-Y-E2 -SE9
Transistors		
Q001	48T73888F12	TR ,CP.FMC2-99
Q002	48T62967F03	TR,DTC124EKA-T146-CP
Q003	48T62966F03	TR,DTA124EKA-T146-CP
Q004	48T62967F03	TR,DTC124EKA-T146-CP
Q007	48T62967F03	TR,DTC124EKA-T146-CP
Q009	48T62967F03	TR,DTC124EKA-T146-CP
Q010	48T94875F04	DTB,CP-123YK-96
Q011	48T15289W04	TR ,2SD2008R-RD
Q013	48T73888F13	TR ,CP FMC3-99
Q015	48T62967F03	TR,DTC124EKA-T146-CP
Q016	48T62967F03	TR,DTC124EKA-T146-CP
Q240	48T62967F03	TR,DTC124EKA-T146-CP
Q261	48T62967F33	TR,DTC343TK-T146 -CP
Q262	48T62967F33	TR,DTC343TK-T146 -CP
Q263	48T62967F33	TR,DTC343TK-T146 -CP
Q264	48T62967F33	TR,DTC343TK-T146 -CP
Q301	48T62967F03	TR,DTC124EKA-T146-CP
Q601	48T62967F03	TR,DTC124EKA-T146-CP
Q602	48T94875F04	DTB,CP-123YK-96
Q651	48T92368F04	TR,2SD1760 R -E5
Q652	48T73888F12	TR ,CP.FMC2-99
Q661	48T62966F03	TR,DTA124EKA-T146-CP
Q662	48T62967F03	TR,DTC124EKA-T146-CP
Q663	48T62967F03	TR,DTC124EKA-T146-CP
Q664	48T62966F01	TR,DTA143EKA-T146-CP
Q671	48T62967F02	TR,DTC114EKA-T146-CP
Q672	48T62967F02	TR,DTC114EKA-T146-CP
Q673	48T63420F01	TR,2SA1037AK-146 -CP
Q674	48T62967F02	TR,DTC114EKA-T146-CP
Q801	48T73888F12	TR ,CP.FMC2-99
Q802	48T93828F04	TR,2SD1994A-S-TA -RD
Q803	48T93828F04	TR,2SD1994A-S-TA -RD
Q822	48T93828F04	TR,2SD1994A-S-TA -RD
Q823	48T52438F04	TR ,2SD601A-S /TX-CP
Q824	48T69176F02	TR ,2SC3421-Y
Q843	48T84366F04	TR,2SB1243-QR-TV2-RD
Q844	48T62967F01	TR,DTC143EKA-T146-CP
Q845	48T63420F01	TR,2SA1037AK-146 -CP
Q846	48T62967F03	TR,DTC124EKA-T146-CP
Q847	48T84366F04	TR,2SB1243-QR-TV2-RD
Q848	48T62967F05	TR,DTC143XKA-T146-CP
Q849	48T69176F02	TR ,2SC3421-Y
Q862	48T73888F12	TR ,CP.FMC2-99
Q863	48T62967F03	TR,DTC124EKA-T146-CP
Diodes		
D001	48T63462F01	DIO,CP.DAN202K -96
D231	48T68828F11	DIO,1SS133 -RH
D601	48T25651W01	DIO,CP MA152WA
D653	48T68828F11	DIO,1SS133 -RH
D654	48T68828F11	DIO,1SS133 -RH
D661	48T68828F11	DIO,1SS133 -RH
D662	48T63462F01	DIO,CP.DAN202K -96
D671	48T63462F01	DIO,CP.DAN202K -96
D802	48T81063F01	DIO,CP.MA159 / TX-CP
D821	48T35355Y01	DIO,1SS244 -A5
D822	48T35355Y01	DIO,1SS244 -A5
D831	48T84052F11	DIO,SI 11ES2-TB5 -R5
D832	48T85357W01	DIO,1PS226 -CP
SD801	48T68580F03	DIO,SI DSA3A4-F5
ZD001	48T25766W22	DIO,ZEN.HZS 9B2L -R5
ZD003	48T25766W36	DIO,ZEN.HZS12A1L -R5
ZD651	48T25766W04	DIO,ZEN.HZS 6B1L -R5
ZD652	48T25766W14	DIO,ZEN.HZS 7B2L -R5

CTM-1503R

Symbol No.	Part No.	Description
ZD801	48T25766W39	DIO,ZEN.HZS12B1L -R5
ZD802	48T25801W08	DIO,ZEN.HZS 4BLL -R5
ZD821	48T25766W25	DIO,ZEN.HZS 9C2L -R5
ZD822	48T25766W33	DIO,ZEN.HZS11C1L -R5
ZD841	48T25766W24	DIO,ZEN.HZS 9C1L -R5
Filters		
CF001	91T75257W02	LPF,LPF11830KH-3C-DB
Z001	91T65112W06	EMI,BK2125HM102 -CP
Z002	91T65112W06	EMI,BK2125HM102 -CP
Z004	91T65112W06	EMI,BK2125HM102 -CP
Z005	91T65112W06	EMI,BK2125HM102 -CP
Z006	91T65112W06	EMI,BK2125HM102 -CP
Z007	91T65112W06	EMI,BK2125HM102 -CP
Z601	91T65112W06	EMI,BK2125HM102 -CP
Z602	91T65112W06	EMI,BK2125HM102 -CP
Coils		
L001	24T16403W23	COI,IND.4R7-M -CP
L002	24T16403W29	COI,IND.15R-M -CP
L651	24T16403W23	COI,IND.4R7-M -CP
L801	25T25663Y01	CHOKE,LAT1608-105-DB
L820	24T70381F16	IND,LAL02 3R9K -A5
VT001	24T35286Y01	IND,MG56 523J -DB
Z201	24T35072W03	FBI,BL02RN1-R62T4-R5
Crystals		
XL001	91T85169W18	XTL,HC-49 4.332M -R5
XL601	91T85169W23	XTL,HC-49 4.500M -R5
Surge Protector		
SA001	48T81909F01	PTT,DSP-201M -A1
Transformer		
T821	25T35480Y01	TRANS,CEE-78 -EA
Capacitors		
C001	08S65128F69	CAP,CER.103K-B1H -CP

Symbol No.	Part No.	Description
C003	08S65128F57	CAP,CER.102K-B1H -CP
C004	08S65128F69	CAP,CER.103K-B1H -CP
C005	08S65128F70	CAP,CER.123K-B1H -CP
C006	08S65128F57	CAP,CER.102K-B1H -CP
C008	08S65128F57	CAP,CER.102K-B1H -CP
C009	08S65128F78	CAP,CER.223K-B1H -CP
C010	08S65128F78	CAP,CER.223K-B1H -CP
C012	08S82122F37	CAP,CER.101J-CH1H-CP
C014	08S65128F78	CAP,CER.223K-B1H -CP
C015	08S65128F69	CAP,CER.103K-B1H -CP
C016	08S65128F78	CAP,CER.223K-B1H -CP
C018	08T55390W13	CAP,PF 472J-1H -R5
C019	08T55390W29	CAP,TF 104J-1H -R5
C021	08S65128F61	CAP,CER.222K-B1H -CP
C022	08S82122F49	CAP,CER.331J-CH1H-CP
C023	08S35374W01	CAP,CER 104K-B1E-CP
C024	08S65128F78	CAP,CER.223K-B1H -CP
C025	08S82122F43	CAP,CER.181J-CH1H-CP
C026	08S35374W01	CAP,CER 104K-B1E-CP
C027	08S82122F21	CAP,CER.22RJ-CH1H-CP
C028	08S82122F17	CAP,CER.15RJ-CH1H-CP
C029	08S82122F37	CAP,CER.101J-CH1H-CP
C030	08S82122F37	CAP,CER.101J-CH1H-CP
C031	08S35374W01	CAP,CER 104K-B1E-CP
C032	08S82122F55	CAP,CER.561J-CH1H-CP
C035	08S65128F78	CAP,CER.223K-B1H -CP
C036	08S82122F37	CAP,CER.101J-CH1H-CP
C037	08S65128F57	CAP,CER.102K-B1H -CP
C038	08S82122F37	CAP,CER.101J-CH1H-CP
C040	08S65128F78	CAP,CER.223K-B1H -CP
C042	08T55390W06	CAP,PF 122J-1H -R5
C044	08S82122F37	CAP,CER.101J-CH1H-CP
C045	08S82122F37	CAP,CER.101J-CH1H-CP
C047	08S65128F69	CAP,CER.103K-B1H -CP
C049	08S65128F69	CAP,CER.103K-B1H -CP
C050	08S35374W01	CAP,CER 104K-B1E-CP
C202	08S65128F57	CAP,CER.102K-B1H -CP
C203	08S65128F57	CAP,CER.102K-B1H -CP
C204	08S65128F57	CAP,CER.102K-B1H -CP
C205	08S65128F57	CAP,CER.102K-B1H -CP
C221	08S65128F63	CAP,CER.332K-B1H -CP
C222	08T55390W23	CAP,TF 333J-1H -R5
C223	08S65128F63	CAP,CER.332K-B1H -CP
C224	08T55390W23	CAP,TF 333J-1H -R5
C232	08S82122F26	CAP,CER.36RJ-CH1H-CP
C301	08T25628Y03	CAP,TF 224M-1C -CP
C302	08T25628Y03	CAP,TF 224M-1C -CP
C303	08T25628Y03	CAP,TF 224M-1C -CP
C304	08T25628Y03	CAP,TF 224M-1C -CP

Symbol No.	Part No.	Description
R001	06T75431W59	RES,RK 102J 1/10 -CP
R002	06T75431W81	RES,RK 822J 1/10 -CP
R003	06T75433W82	RES,RK 243J 1/4 -CP
R004	06T75431W99	RES,RK 473J 1/10 -CP
R005	06T75431W96	RES,RK 363J 1/10 -CP
R007	06T75431W87	RES,RK 153J 1/10 -CP
R008	06T75431W75	RES,RK 472J 1/10 -CP
R009	06T75431W83	RES,RK 103J 1/10 -CP
R010	06T75431W97	RES,RK 393J 1/10 -CP
R011	06T75431W70	RES,RK 302J 1/10 -CP
R012	06T75432W50	RES,RK JUMPER1/10-CP
R013	06T75432W50	RES,RK JUMPER1/10-CP
R016	06T75431W83	RES,RK 103J 1/10 -CP
R020	06T75431W91	RES,RK 223J 1/10 -CP
R021	06T75431W91	RES,RK 223J 1/10 -CP
R023	06T25279Y04	RES,RK JUMPER1/16-CP
R024	06T75432W50	RES,RK JUMPER1/10-CP
R025	06T75433W47	RES,RK 821J 1/4 -CP
R026	06T75431W59	RES,RK 102J 1/10 -CP
R027	06T75431W59	RES,RK 102J 1/10 -CP
R028	06T75431W67	RES,RK 222J 1/10 -CP
R029	06T75431W67	RES,RK 222J 1/10 -CP
R030	06T75433W25	RES,RK 101J 1/4 -CP
R031	06T75431W91	RES,RK 223J 1/10 -CP
R032	06T25277Y57	RES,RK 102J 1/16 -CP
R033	06T25279Y04	RES,RK JUMPER1/16-CP
R034	06T75431W91	RES,RK 223J 1/10 -CP
R036	06T75431W83	RES,RK 103J 1/10 -CP
R037	06T75431W11	RES,RK 10RJ 1/10 -CP
R038	06T75432W50	RES,RK JUMPER1/10-CP
R039	06T75432W24	RES,RK 474J 1/10 -CP
R041	06T75431W67	RES,RK 222J 1/10 -CP
R044	06T75431W59	RES,RK 102J 1/10 -CP
R045	06T75431W59	RES,RK 102J 1/10 -CP
R046	06S70072F01	RES,CP .4R7-J-1/4-CP
R047	06T75431W77	RES,RK 562J 1/10 -CP
R048	06T75431W77	RES,RK 562J 1/10 -CP
R049	06T75433W37	RES,RK 331J 1/4 -CP
R051	06T75431W43	RES,RK 221J 1/10 -CP
R053	06T75431W43	RES,RK 221J 1/10 -CP
R054	06T75433W47	RES,RK 821J 1/4 -CP
R057	06T75431W91	RES,RK 223J 1/10 -CP
R058	06T75431W91	RES,RK 223J 1/10 -CP
R059	06T75431W75	RES,RK 472J 1/10 -CP
R203	06T75431W43	RES,RK 221J 1/10 -CP
R204	06T75431W43	RES,RK 221J 1/10 -CP
R221	06T75431W90	RES,RK 203J 1/10 -CP
R222	06T75431W90	RES,RK 203J 1/10 -CP
R225	06T75431W83	RES,RK 103J 1/10 -CP

Symbol No.	Part No.	Description
R226	06T75431W90	RES,RK 203J 1/10 -CP
R227	06T75431W90	RES,RK 203J 1/10 -CP
R228	06T75431W83	RES,RK 103J 1/10 -CP
R229	06T75431W83	RES,RK 103J 1/10 -CP
R231	06T75431W99	RES,RK 473J 1/10 -CP
R232	06T75432W50	RES,RK JUMPER1/10-CP
R234	06T75431W91	RES,RK 223J 1/10 -CP
R235	06T75431W82	RES,RK 912J 1/10 -CP
R236	06T75431W60	RES,RK 112J 1/10 -CP
R237	06T75431W60	RES,RK 112J 1/10 -CP
R238	06T75431W89	RES,RK 183J 1/10 -CP
R242	06T75432W50	RES,RK JUMPER1/10-CP
R243	06T75432W50	RES,RK JUMPER1/10-CP
R261	06T75431W42	RES,RK 201J 1/10 -CP
R262	06T75431W42	RES,RK 201J 1/10 -CP
R263	06T75431W98	RES,RK 433J 1/10 -CP
R264	06T75431W98	RES,RK 433J 1/10 -CP
R265	06T75431W35	RES,RK 101J 1/10 -CP
R266	06T75431W35	RES,RK 101J 1/10 -CP
R267	06T75431W42	RES,RK 201J 1/10 -CP
R268	06T75431W42	RES,RK 201J 1/10 -CP
R269	06T75431W98	RES,RK 433J 1/10 -CP
R270	06T75431W98	RES,RK 433J 1/10 -CP
R271	06T75431W35	RES,RK 101J 1/10 -CP
R272	06T75431W35	RES,RK 101J 1/10 -CP
R301	06T75433W33	RES,RK 221J 1/4 -CP
R302	06T75433W33	RES,RK 221J 1/4 -CP
R303	06T75433W33	RES,RK 221J 1/4 -CP
R304	06T75433W33	RES,RK 221J 1/4 -CP
R305	06T75433W73	RES,RK 103J 1/4 -CP
R306	06T75431W84	RES,RK 113J 1/10 -CP
R307	06T75431W87	RES,RK 153J 1/10 -CP
R308	06T75431W43	RES,RK 221J 1/10 -CP
R602	06T75432W08	RES,RK 104J 1/10 -CP
R604	06T75431W91	RES,RK 223J 1/10 -CP
R605	06T75431W91	RES,RK 223J 1/10 -CP
R606	06T75431W91	RES,RK 223J 1/10 -CP
R607	06T75431W83	RES,RK 103J 1/10 -CP
R608	06T75431W83	RES,RK 103J 1/10 -CP
R611	06T75431W59	RES,RK 102J 1/10 -CP
R612	06T75431W59	RES,RK 102J 1/10 -CP
R613	06T75431W59	RES,RK 102J 1/10 -CP
R614	06T75431W59	RES,RK 102J 1/10 -CP
R615	06T75431W59	RES,RK 102J 1/10 -CP
R616	06T75431W59	RES,RK 102J 1/10 -CP
R617	06T75431W59	RES,RK 102J 1/10 -CP
R618	06T75431W91	RES,RK 223J 1/10 -CP
R619	06T75431W91	RES,RK 223J 1/10 -CP
R622	06T75431W69	RES,RK 272J 1/10 -CP

Symbol No.	Part No.	Description
C602	08S65128F78	CAP,CER.223K-B1H -CP
C603	08S65128F78	CAP,CER.223K-B1H -CP
C604	08S65128F69	CAP,CER.103K-B1H -CP
C607	08S35374W01	CAP,CER 104K-B1E-CP
C608	08S82122F17	CAP,CER.15RJ-CH1H-CP
C609	08S82122F15	CAP,CER.12RJ-CH1H-CP
C610	08S35374W01	CAP,CER 104K-B1E-CP
C611	08S65128F69	CAP,CER.103K-B1H -CP
C612	08S65128F69	CAP,CER.103K-B1H -CP
C613	08S82122F37	CAP,CER.101J-CH1H-CP
C614	08S82122F37	CAP,CER.101J-CH1H-CP
C617	08S82122F37	CAP,CER.101J-CH1H-CP
C620	08S82122F37	CAP,CER.101J-CH1H-CP
C623	08S65128F57	CAP,CER.102K-B1H -CP
C630	08S65128F57	CAP,CER.102K-B1H -CP
C661	08S82122F49	CAP,CER.331J-CH1H-CP
C662	08S65128F57	CAP,CER.102K-B1H -CP
C671	08S82122F37	CAP,CER.101J-CH1H-CP
C672	08S35374W01	CAP,CER 104K-B1E-CP
C673	08S65128F61	CAP,CER.222K-B1H -CP
C674	08S65128F69	CAP,CER.103K-B1H -CP
C801	08S65128F90	CAP,CER 473K-B1H -CP
C802	08S65128F78	CAP,CER.223K-B1H -CP
C803	08S65128F79	CAP,CER.273K-B1H -CP
C806	08S65128F79	CAP,CER.273K-B1H -CP
C807	08S65128F78	CAP,CER.223K-B1H -CP
C808	08S65128F78	CAP,CER.223K-B1H -CP
C810	08T95466W07	CAP,CER 103K-B2J -CP
C811	08T95466W07	CAP,CER 103K-B2J -CP
C813	08T95466W07	CAP,CER 103K-B2J -CP
C822	08S65128F66	CAP,CER.562K-B1H -CP
C823	08T25628Y04	CAP,TF 104M-1C -CP
C831	08T55401W37	CAP,TF 104J-1H -E2
C832	08S65128F71	CAP,CER.153K-B1H -CP
C833	08S65128F71	CAP,CER.153K-B1H -CP
E001	23S75373W08	CAP,ELY R10-1H -R2
E003	23S75373W13	CAP,ELY 1R0-1H -R2
E004	23S75373W06	CAP,ELY 101-1C -R2
E005	23S82372F19	CAP,ELY.2R2-1H-BP-R2
E006	23S75372W02	CAP,ELY 101-1A -R2
E007	23S75373W14	CAP,ELY 2R2-1H -R2
E008	23S75372W03	CAP,ELY 221-1A -H2
E012	23S75373W03	CAP,ELY 22R-1C -R2
E013	23S75373W02	CAP,ELY 10R-1C -R2
E014	23S75373W03	CAP,ELY 22R-1C -R2
E203	23S75373W08	CAP,ELY R10-1H -R2
E204	23S75373W08	CAP,ELY R10-1H -R2
E207	23S75373W03	CAP,ELY 22R-1C -R2
E208	23S75373W03	CAP,ELY 22R-1C -R2

Symbol No.	Part No.	Description
E209	23S75373W12	CAP,ELY R68-1H -R2
E210	23S75373W12	CAP,ELY R68-1H -R2
E221	23S75373W02	CAP,ELY 10R-1C -R2
E222	23S75373W02	CAP,ELY 10R-1C -R2
E223	23S75373W02	CAP,ELY 10R-1C -R2
E224	23S75373W02	CAP,ELY 10R-1C -R2
E225	23S75373W03	CAP,ELY 22R-1C -R2
E226	23S75373W07	CAP,ELY 4R7-1V -R2
E227	23S75373W07	CAP,ELY 4R7-1V -R2
E231	23S75373W02	CAP,ELY 10R-1C -R2
E232	23S75373W14	CAP,ELY 2R2-1H -R2
E233	23S75373W03	CAP,ELY 22R-1C -R2
E241	23S75373W14	CAP,ELY 2R2-1H -R2
E242	23S75373W14	CAP,ELY 2R2-1H -R2
E243	23S75373W14	CAP,ELY 2R2-1H -R2
E261	23S75373W14	CAP,ELY 2R2-1H -R2
E262	23S75373W14	CAP,ELY 2R2-1H -R2
E263	23S75373W14	CAP,ELY 2R2-1H -R2
E264	23S75373W14	CAP,ELY 2R2-1H -R2
E301	23S65134W65	CAP,ELY 1R0-1H(3)-E2
E302	23T95115W02	CAP,AD 1R0-1H -R2
E303	23S65134W34	CAP,ELY 47R-1C(6)-E6
E304	23S75373W02	CAP,ELY 10R-1C -R2
E601	23S75373W03	CAP,ELY 22R-1C -R2
E602	23S75372W03	CAP,ELY 221-1A -H2
E603	23S75373W03	CAP,ELY 22R-1C -R2
E604	23T15765Y78	CAP,TAN 22R-1C-E -E1
E651	23S75373W05	CAP,ELY 47R-1C -R2
E652	23S75373W13	CAP,ELY 1R0-1H -R2
E653	23S75373W01	CAP,ELY 221-0J -R2
E654	23S75373W08	CAP,ELY R10-1H -R2
E656	23S75373W02	CAP,ELY 10R-1C -R2
E801	23T75346W03	CAP,X-PRO 332-1C +
E802	23S75373W03	CAP,ELY 22R-1C -R2
E803	23S75373W05	CAP,ELY 47R-1C -R2
E822	23S75373W06	CAP,ELY 101-1C -R2
E823	23S65134W55	CAP,ELY 22R-1V(6)-E6
E825	23S75373W03	CAP,ELY 22R-1C -R2
E826	23S55311W36	CAP,TAN 47R-1C-D -E2
E827	23S75373W06	CAP,ELY 101-1C -R2
E841	23S75373W02	CAP,ELY 10R-1C -R2
E842	23S75373W05	CAP,ELY 47R-1C -R2
E843	23S75373W06	CAP,ELY 101-1C -R2
E844	23S75373W04	CAP,ELY 33R-1C -R2
Resistors		
J012	06T55066F39	RES,FC .0R0J-1/4 -A5

Symbol No.	Part No.	Description
R623	06T75432W08	RES,RK 104J 1/10 -CP
R624	06T75431W99	RES,RK 473J 1/10 -CP
R625	06T75432W50	RES,RK JUMPER1/10-CP
R629	06T75431W99	RES,RK 473J 1/10 -CP
R631	06T75431W59	RES,RK 102J 1/10 -CP
R632	06T75431W59	RES,RK 102J 1/10 -CP
R634	06T75431W45	RES,RK 271J 1/10 -CP
R635	06T75431W99	RES,RK 473J 1/10 -CP
R636	06T75431W99	RES,RK 473J 1/10 -CP
R638	06T75431W99	RES,RK 473J 1/10 -CP
R639	06T75431W99	RES,RK 473J 1/10 -CP
R640	06T75432W24	RES,RK 474J 1/10 -CP
R641	06T75431W91	RES,RK 223J 1/10 -CP
R642	06T75431W59	RES,RK 102J 1/10 -CP
R643	06T75431W59	RES,RK 102J 1/10 -CP
R644	06T75431W99	RES,RK 473J 1/10 -CP
R645	06T75431W45	RES,RK 271J 1/10 -CP
R646	06T75431W75	RES,RK 472J 1/10 -CP
R647	06T75431W75	RES,RK 472J 1/10 -CP
R648	06T75432W50	RES,RK JUMPER1/10-CP
R651	06T75433W64	RES,RK 432J 1/4 -CP
R652	06T75432W29	RES,RK 754J 1/10 -CP
R654	06T75433W65	RES,RK 472J 1/4 -CP
R655	06T75433W65	RES,RK 472J 1/4 -CP
R656	06T75431W91	RES,RK 223J 1/10 -CP
R657	06T75431W75	RES,RK 472J 1/10 -CP
R659	06T75431W75	RES,RK 472J 1/10 -CP
R661	06T75433W81	RES,RK 223J 1/4 -CP
R662	06T75433W33	RES,RK 221J 1/4 -CP
R663	06T75431W91	RES,RK 223J 1/10 -CP
R664	06T75431W99	RES,RK 473J 1/10 -CP
R666	06T75432W50	RES,RK JUMPER1/10-CP
R667	06T75432W50	RES,RK JUMPER1/10-CP
R668	06T75432W50	RES,RK JUMPER1/10-CP
R671	06T75431W59	RES,RK 102J 1/10 -CP
R672	06T75431W83	RES,RK 103J 1/10 -CP
R673	06T75431W91	RES,RK 223J 1/10 -CP
R674	06T75431W91	RES,RK 223J 1/10 -CP
R675	06T75431W67	RES,RK 222J 1/10 -CP
R676	06T75431W71	RES,RK 332J 1/10 -CP
R677	06T75431W35	RES,RK 101J 1/10 -CP
R801	06T75433W49	RES,RK 102J 1/4 -CP
R802	06T75433W39	RES,RK 391J 1/4 -CP
R803	06T75434W22	RES,RK 2R2J 1/4 -CP
R804	06T75434W22	RES,RK 2R2J 1/4 -CP
R805	06T75433W13	RES,RK 33RJ 1/4 -CP
R806	06T75433W13	RES,RK 33RJ 1/4 -CP
R807	06T75433W13	RES,RK 33RJ 1/4 -CP
R808	06T75433W13	RES,RK 33RJ 1/4 -CP

Symbol No.	Part No.	Description
R809	06T75433W13	RES,RK 33RJ 1/4 -CP
R810	06T75433W13	RES,RK 33RJ 1/4 -CP
R811	06T75432W50	RES,RK JUMPER1/10-CP
R812	06T75433W73	RES,RK 103J 1/4 -CP
R822	06T75433W38	RES,RK 361J 1/4 -CP
R823	06T75434W22	RES,RK 2R2J 1/4 -CP
R824	06T75434W16	RES,RK 564J 1/4 -CP
R825	06T75431W79	RES,RK 682J 1/10 -CP
R826	06T75431W11	RES,RK 10RJ 1/10 -CP
R827	06T75434W18	RES,RK 684J 1/4 -CP
R828	06T75433W32	RES,RK 201J 1/4 -CP
R829	06T75434W13	RES,RK 434J 1/4 -CP
R831	06T75433W73	RES,RK 103J 1/4 -CP
R835	06T75431W92	RES,RK 243J 1/10 -CP
R836	06T75433W55	RES,RK 182J 1/4 -CP
R837	06T75433W55	RES,RK 182J 1/4 -CP
R838	06T75434W25	RES,RK 8R2J 1/4 -CP
R839	06T75434W25	RES,RK 8R2J 1/4 -CP
R840	06T75434W25	RES,RK 8R2J 1/4 -CP
R841	06T75434W25	RES,RK 8R2J 1/4 -CP
R844	06T75433W73	RES,RK 103J 1/4 -CP
R845	06T75433W57	RES,RK 222J 1/4 -CP
R846	06T75431W83	RES,RK 103J 1/10 -CP
R847	06T75433W82	RES,RK 243J 1/4 -CP
R848	06T75433W55	RES,RK 182J 1/4 -CP
R849	06T75433W55	RES,RK 182J 1/4 -CP
R850	06T75433W54	RES,RK 162J 1/4 -CP
R851	06T75433W54	RES,RK 162J 1/4 -CP
R852	06T75433W45	RES,RK 681J 1/4 -CP
R853	06T75431W83	RES,RK 103J 1/10 -CP
R860	06T75432W28	RES,RK 684J 1/10 -CP
R862	06T75431W59	RES,RK 102J 1/10 -CP
R864	06T75431W83	RES,RK 103J 1/10 -CP
R865	06T75432W28	RES,RK 684J 1/10 -CP

Connectors

CB201	09T25436Y06	WTB,53253-0610 -DB
CB601	09T45434W15	FFC,52271-1590 -ED
CB802	09T25436Y02	WTB,53253-0210 -DB
CB301 CB302	01T35356Y01	ASSY,CONN 0203-01A
CB303 CB304	01T35356Y02	ASSY,CONN 0203-02A

Symbol No.	Part No.	Description
Front P.W.Board		
IC's		
IC401	51T85152W02	LC75883E -QT
IC402	51T25419Y01	RS-181 -NE6
Transistor		
Q405	48T62967F02	TR, DTC114EKA-T146-CP
Diodes		
D401	48T85357W01	DIO, 1PS226 -CP
D402	48T85357W01	DIO, 1PS226 -CP
D403	48T85357W01	DIO, 1PS226 -CP
D404	48T85357W01	DIO, 1PS226 -CP
D405	48T85357W01	DIO, 1PS226 -CP
D406	48T85357W01	DIO, 1PS226 -CP
D407	48T85357W01	DIO, 1PS226 -CP
D408	48T85357W01	DIO, 1PS226 -CP
D409	48T85357W01	DIO, 1PS226 -CP
D410	48T85357W01	DIO, 1PS226 -CP
D411	48T81063F01	DIO, CP.MA159 / TX-CP
D412	48T81063F01	DIO, CP.MA159 / TX-CP
D413	48T63462F01	DIO, CP.DAN202K -96
ZD401	48T62934F26	DIO, ZEN.RD6.2MB3 -CP
ZD418	48T84735F44	DIO, ZEN.MA3180-L -CP
ZD419	48T84735F44	DIO, ZEN.MA3180-L -CP
ZD420	48T84735F44	DIO, ZEN.MA3180-L -CP
ZD421	48T84735F44	DIO, ZEN.MA3180-L -CP
LED's		
LD401	48T25534Y02	LED, RED BR1111C -CP
LD402	48T25534Y09	LED, BLU DB1111C10-CP
LD403	48T25534Y09	LED, BLU DB1111C10-CP
LD404	48T25534Y09	LED, BLU DB1111C10-CP
LD405	48T25534Y09	LED, BLU DB1111C10-CP
LD406	48T25534Y09	LED, BLU DB1111C10-CP
LD407	48T25534Y09	LED, BLU DB1111C10-CP
LD408	48T25534Y09	LED, BLU DB1111C10-CP
LD409	48T25534Y09	LED, BLU DB1111C10-CP
LD410	48T25534Y09	LED, BLU DB1111C10-CP
LD411	48T25534Y09	LED, BLU DB1111C10-CP
LD412	48T25534Y09	LED, BLU DB1111C10-CP
LD413	48T25534Y09	LED, BLU DB1111C10-CP
LD414	48T25534Y09	LED, BLU DB1111C10-CP
LD415	48T25534Y09	LED, BLU DB1111C10-CP
LD416	48T25534Y09	LED, BLU DB1111C10-CP
LD417	48T25534Y09	LED, BLU DB1111C10-CP
LD418	48T25534Y09	LED, BLU DB1111C10-CP
LD419	48T25534Y09	LED, BLU DB1111C10-CP
LD420	48T25534Y09	LED, BLU DB1111C10-CP
LD421	48T25534Y09	LED, BLU DB1111C10-CP
LD422	48T25583Y01	LED, BLU KB1111CE -CP
LD423	48T25534Y09	LED, BLU DB1111C10-CP
LD424	48T25534Y09	LED, BLU DB1111C10-CP
LD425	48T25534Y09	LED, BLU DB1111C10-CP
LD426	48T25534Y09	LED, BLU DB1111C10-CP
LD427	48T25534Y09	LED, BLU DB1111C10-CP
LD428	48T25534Y09	LED, BLU DB1111C10-CP
LD429	48T25534Y09	LED, BLU DB1111C10-CP
LD430	48T25534Y09	LED, BLU DB1111C10-CP
Switches		
SW400	40T55656W06	SW, TACT SKQMAJ001-E2(RESET)
SW401	40T55656W06	SW, TACT SKQMAJ001-E2(T.INFO)
SW402	40T55656W06	SW, TACT SKQMAJ001-E2(FWD/FF)
SW403	40T55656W06	SW, TACT SKQMAJ001-E2 (PLAY/PAUSE/TUNE/A.ME)
SW404	40T55656W06	SW, TACT SKQMAJ001-E2(DN/BWD)
SW406	40T55656W06	SW, TACT SKQMAJ001-E2 (PWR/SOURCE)
SW407	40T55656W06	SW, TACT SKQMAJ001-E2(BAND)
SW408	40T55656W06	SW, TACT SKQMAJ001-E2(BBE)
SW409	40T55656W06	SW, TACT SKQMAJ001-E2(DISP/INTLZ)
SW410	40T55656W06	SW, TACT SKQMAJ001-E2(CHG)
SW411	40T55656W06	SW, TACT SKQMAJ001-E2(F)
SW412	40T55656W06	SW, TACT SKQMAJ001-E2(1/AF)
SW413	40T55656W06	SW, TACT SKQMAJ001-E2(2/NEWS)
SW414	40T55656W06	SW, TACT SKQMAJ001-E2(3/PTY)
SW415	40T55656W06	SW, TACT SKQMAJ001-E2(4/M.I.X.)
SW416	40T55656W06	SW, TACT SKQMAJ001-E2(5/RPT)
SW417	40T55656W06	SW, TACT SKQMAJ001-E2(6/SCAN)
SW418	40T55656W06	SW, TACT SKQMAJ001-E2(B.C.)
SW419	40T55656W06	SW, TACT SKQMAJ001-E2(ANGLE△)
SW420	40T55656W06	SW, TACT SKQMAJ001-E2(ANGLE▽)
Capacitors		
C404	08S82122F57	CAP, CER.681J-CH1H-CP
C405	08T15399W03	CAP, CER.473K-B1H -CP
C406	08T15399W03	CAP, CER.473K-B1H -CP

Symbol No.	Part No.	Description
C407	08T15399W03	CAP,CER.473K-B1H -CP
C408	08S35374W01	CAP,CER 104K-B1E-CP
E402	23T15765Y17	CAP,TAN 4R7-1C-S -CP
Resistors		
R404	06T75433W48	RES,RK 911J 1/4 -CP
R405	06T75433W48	RES,RK 911J 1/4 -CP
R406	06T75433W41	RES,RK 471J 1/4 -CP
R407	06T75433W45	RES,RK 681J 1/4 -CP
R408	06T75433W41	RES,RK 471J 1/4 -CP
R409	06T75433W41	RES,RK 471J 1/4 -CP
R410	06T75433W41	RES,RK 471J 1/4 -CP
R411	06T75433W51	RES,RK 122J 1/4 -CP
R412	06T75433W49	RES,RK 102J 1/4 -CP
R413	06T75433W49	RES,RK 102J 1/4 -CP
R414	06T75431W59	RES,RK 102J 1/10 -CP
R415	06T75431W59	RES,RK 102J 1/10 -CP
R416	06T75431W59	RES,RK 102J 1/10 -CP
R417	06T75431W59	RES,RK 102J 1/10 -CP
R418	06T75431W59	RES,RK 102J 1/10 -CP
R419	06T75431W75	RES,RK 472J 1/10 -CP
R420	06T75431W59	RES,RK 102J 1/10 -CP
R421	06T75431W59	RES,RK 102J 1/10 -CP
R422	06T75431W59	RES,RK 102J 1/10 -CP
R423	06T75431W59	RES,RK 102J 1/10 -CP
R424	06T75431W98	RES,RK 433J 1/10 -CP
R425	06T75431W59	RES,RK 102J 1/10 -CP
R426	06T75431W59	RES,RK 102J 1/10 -CP
R427	06T75431W59	RES,RK 102J 1/10 -CP
R428	06T75431W59	RES,RK 102J 1/10 -CP
R429	06T75431W59	RES,RK 102J 1/10 -CP
R430	06T75431W59	RES,RK 102J 1/10 -CP
R431	06T75433W49	RES,RK 102J 1/4 -CP
R432	06T75433W49	RES,RK 102J 1/4 -CP
R440	06T75431W59	RES,RK 102J 1/10 -CP
R441	06T75431W83	RES,RK 103J 1/10 -CP
R442	06T75431W83	RES,RK 103J 1/10 -CP
R443	06T75431W59	RES,RK 102J 1/10 -CP
R444	06T75431W83	RES,RK 103J 1/10 -CP
R445	06T75431W59	RES,RK 102J 1/10 -CP
R446	06T75433W25	RES,RK 101J 1/4 -CP
R447	06T75431W91	RES,RK 223J 1/10 -CP
R456	06T75433W75	RES,RK 123J 1/4 -CP
R457	06T75433W56	RES,RK 202J 1/4 -CP
R459	06T75433W56	RES,RK 202J 1/4 -CP
R462	06T75432W08	RES,RK 104J 1/10 -CP

Symbol No.	Part No.	Description
Miscellaneous		
ANT001	01T15513W29	ASSY,ANT CABLE 7861R
CB801	09T35343Y16	WTB,IMSA9451B-16 -DB
CH401	09T25444Y15	BTB,55323-1511 -B
CH601	01T35001Y01	ASSY,UNIZ0N CONN 52R
CH802	01T25413Y01	ASSY,CONN 2P
DIN501	09T55493W02	DIN,SKT 8P CMS-R -DT
ET201	01T15332Y09	ASSY,WIRE RCA 7861R0 (R-OUT/SUB.W & FRONT OUT)
JK601	09T95460W01	JAC,HSJ0857-01-1010+
LCD401	65T25173Y03	LCD,WTD-17837H
M802	59T65085W01	MOTOR,LOAD FF-050SK (NOSE MOTOR/7V-370mA)
SFL1	65T25231Y01	SFL,XQ050-56004A -DB
SW405	40T45670W13	SPL,EC11B15243 -DB (ROTARY ENCODER/MODE•LOUD)
SW601	40T15494Y02	SW,DETCT SPVG13 -E6 (NOSE OPEN DET)
SW602	40T15494Y01	SW,DETCT SPVG23 -E6 (NOSE CLOSE DET)

Cabinet Assembly Parts List

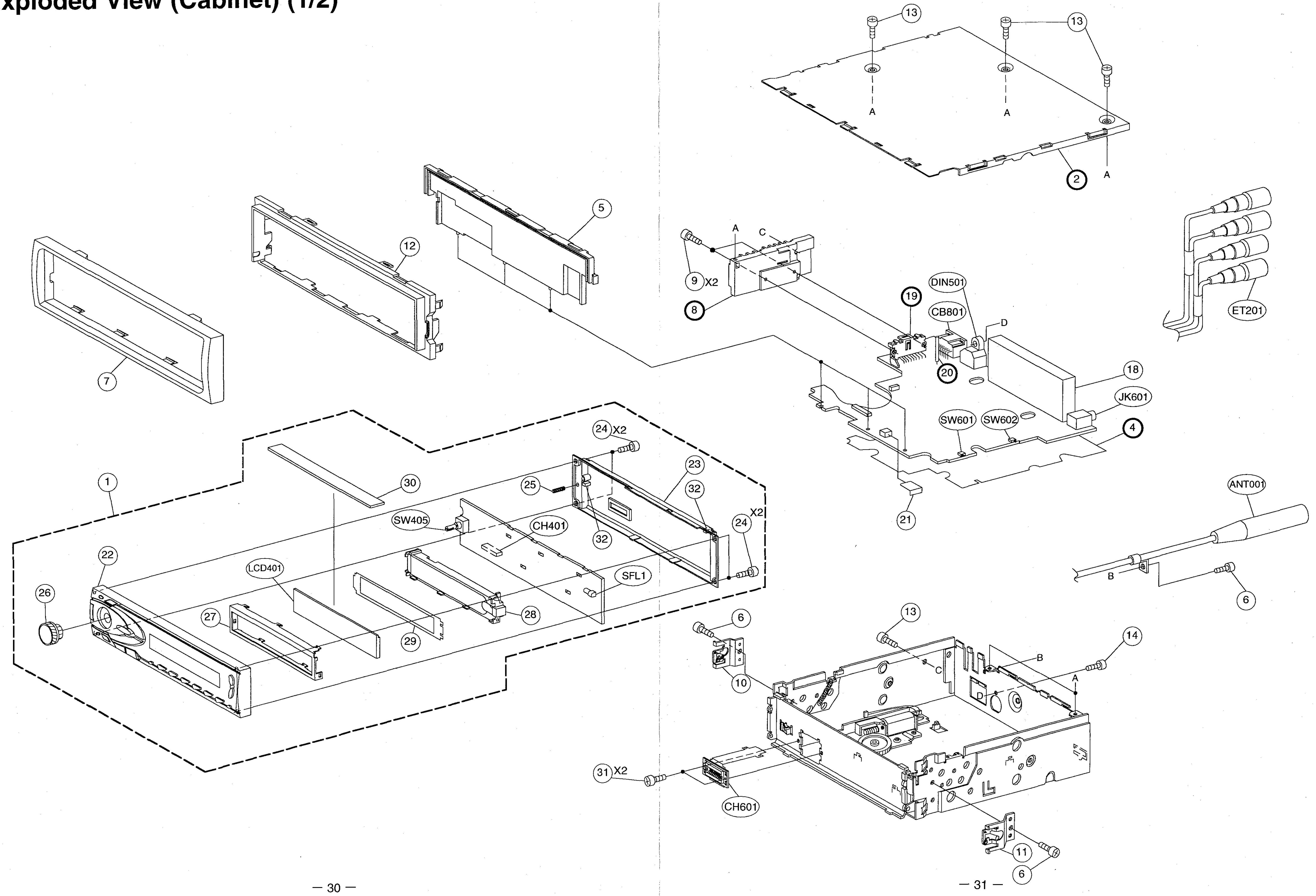
NOTE:Parts without part number are not supplied.

Symbol No.	Index	Part No.	Description
1		01V41500Y16	ASSY,NOSE UNIT 1503R
5		13D32057Y01	NOSE,BASE (COM)
6		03S44205G07	SCR,T-TITE M2.6X5
7		33C10618Y04	FACE,PLATE
9		03S38013W05	SCR,T-TITE M2.6X16
10		07D91595W01	BKT,SIDE ASSY
11		07D91595W02	BKT,SIDE(R) ASSY
12		13D21372Y01	NOSE,BASE COVER
13		03S71677F02	SCR,T-TITE-B M2.6X6
14		03S68555F16	SCR,WAVE M2.6X8
18		77C31331Y01	MB4R605A (TU001)
21		26A31722Y01	SHIELD,PLATE
22		13D31424Y08	NOSE,PIECE ASSY
23		13D31239Y02	NOSE,BOTTOM
24		03S68555F20	SCR,WAVE M1.7X5
25		41A50111W10	SPRING,KNOB
26		36C31240Y02	KNOB,VOL ASSY
27		15B20787Y02	COVER,LCD
28		15D20785Y01	CASE,LCD ASSY
29		26A20786Y01	REFLECTOR,SHEET
30		75T85248W10	RUBBER,ELECTRIC
31		03S94385F77	SCR,NYLOK M1.7X3
32		75S21219Y91	CUS,RUBBER 5X3XT2
100		01C21375Y03	ASSY,BKT F BASE
101		07B21380Y01	BKT,SLIDER
102		07B20734Y01	BKT,BASE L
103		07B20734Y02	BKT,BASE R
104		07A21381Y01	BKT,ARM(L)
105		07A21381Y02	BKT,ARM(R)
106		04B41345P54	WASHER,LOCK
107		03A20851Y02	SCR,SLIDER
108		49A22103Y01	ROLLER,SLIDER FRONT
109		44A20248Y01	GEAR,SLIDER
110		44T25192Y01	GEAR,CLUTCH ASSY
111		07C20740Y01	BKT,MOTOR
112		44A90467W02	GEAR,WORM
113		03S68259F23	SCR,P-LOCK M2X3
114		03S94385F13	SCR,NYLOK M2.6X3
115		41A22014Y01	SPRING,EXTENSION
116		03S94385F24	SCREW,NYLOK
117		14S11351Y95	INS,CVR 8X6XT0.25
118		75S21219Y48	CUS,RUB(9X4.5XT2)

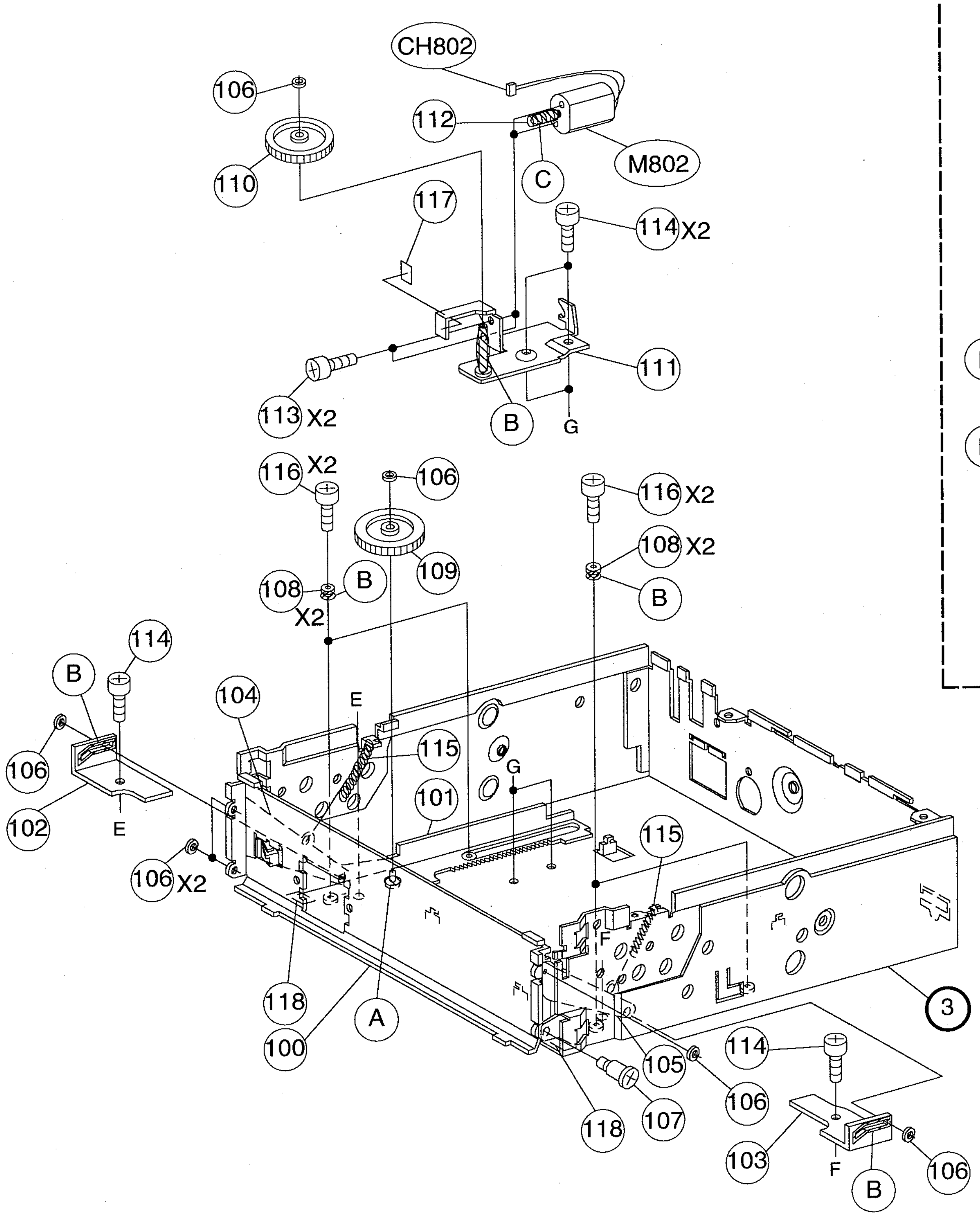
Symbol No.	Index	Part No.	Description

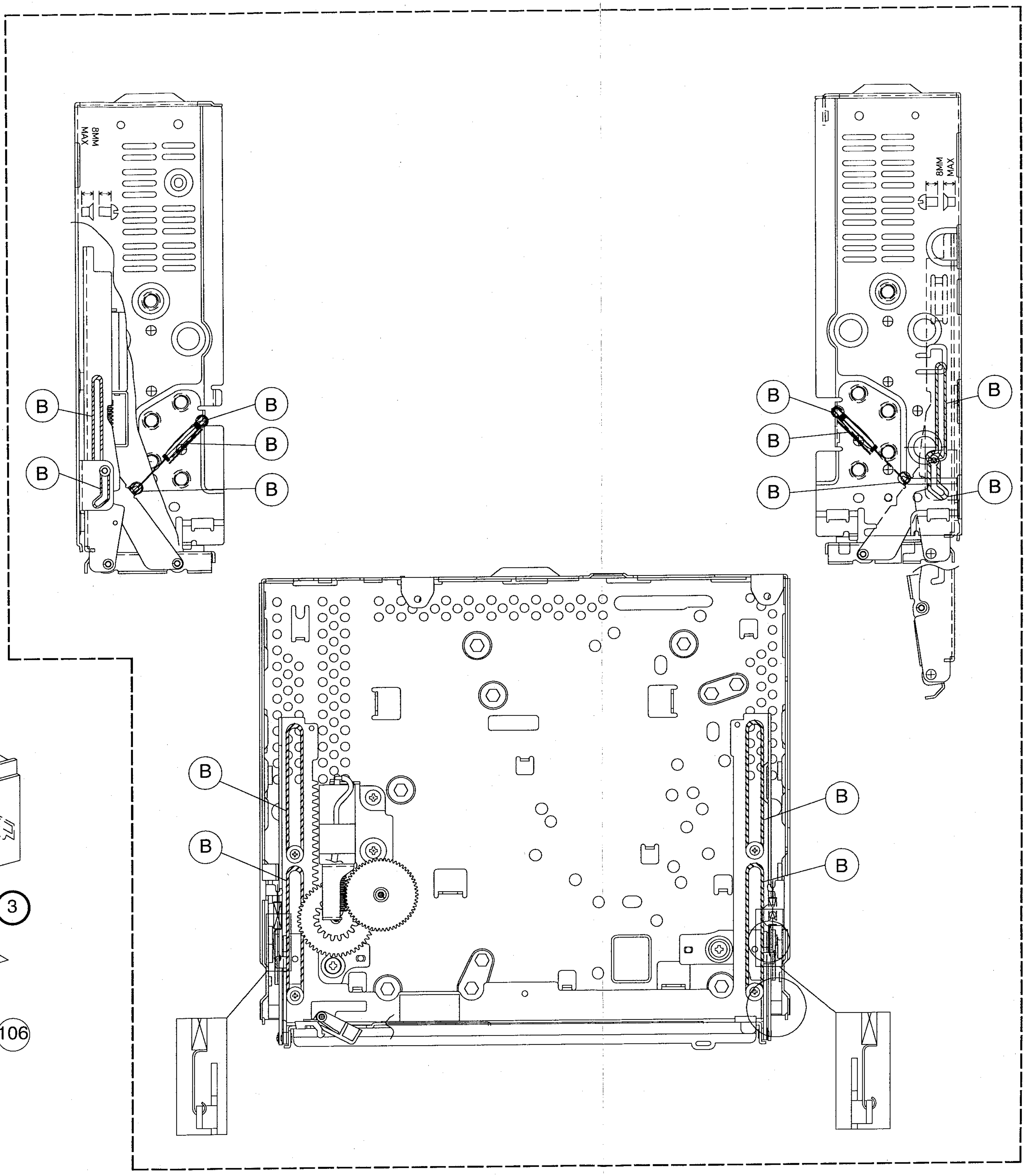
CTM-1503R

Exploded View (Cabinet) (1/2)


13
13
A
A
A
2
5
12
7
9 X2
A
C
8
19
DIN501
CB801
D
20
18
JK601
SW601
SW602
4
ET201
21
ANT001
B
6
1
30
SW405
CH401
25
24 X2
23
32
32
24 X2
22
26
LCD401
SFL1
27
28
29
6
13
14
B
A
C
D
10
31 X2
CH601
11
6

Exploded View (Cabinet) (2/2)


CH802
106
112
M802
110
C
117
114 X2
111
113 X2
B
G
116 X2
106
116 X2
108 X2
109
108
X2
B
B
114
B
104
E
115
G
101
106
102
E
115
106 X2
F
118
A
100
3
114
105
106
118
107
103
F
B
106


8MM MAX
B
B
B
B
B
8MM MAX
B
B
B
B
B
B
B
B
B

▨ ....point of GREASE applied.

Ⓐ	GREASE, FG-53C (11S20853Y01)
Ⓑ	GREASE, E PASTE (11S42419J09)
Ⓒ	GREASE SILICON (11S490487)

ALPINE

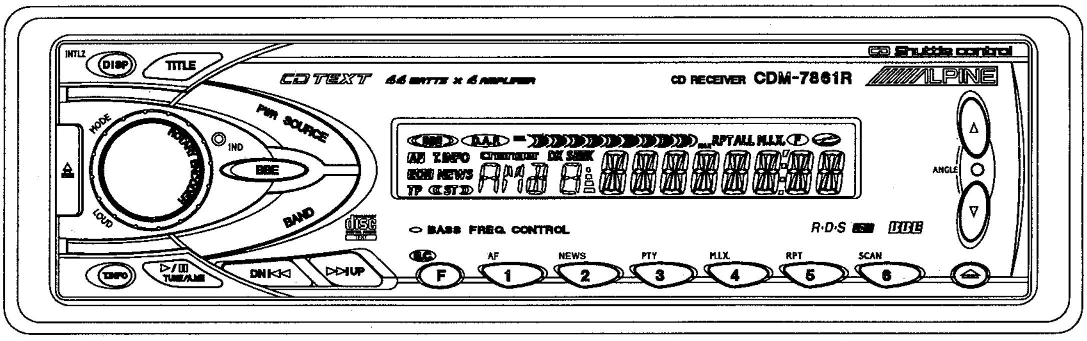
SERVICE MANUAL

FM/MW/LW/RDS

Compact Disc Receiver

COMPACT
disc
DIGITAL AUDIO
TEXT

- The model described in this manual is developed from Model CDA-7865R. For information that is not mentioned in this service manual, refer to the Service Manual • CDA-7865R (Part No. 68E31106S01).


INTLZ
DISP
TITLE
CD TEXT
44 WATTS x 4 AMPLIFIER
CD RECEIVER CDM-7861R
ALPINE
CD Shuttle control
MODE
ROTARY ENCODER
IND
PWR SOURCE
BBE
BAND
LOUD
ANGLE
BASS FREQ. CONTROL
R·D·S
T.INFO
DN
UP
TUNE/A.ME
F
AF
1
NEWS
2
PTY
3
M.I.X.
4
RPT
5
SCAN
6

CDM-7861R

Contents

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Specifications 4, 5
Adjustment Procedures 6, 7
Adjustment Locations 7
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Parts Layout on P.W.Boards and Wiring Diagram .... 9~14
Schematic Diagram .... 15~22
Terminal Voltage of IC/TR .... 23~25
Description of IC Terminal .... 26~28
Electrical Parts List .... 29~35
Cabinet Assembly Parts List 36
Exploded View (Cabinet) .... 37~40

Parts Layout on P.W.Boards and Wiring Diagram (Only CD Deck Mechanism)
Schematic Diagram (Only CD Deck Mechanism)
Terminal Voltage of IC/TR (Only CD Deck Mechanism)
Description of IC Terminal (Only DP23S070)
Exploded View (CD Deck Mechanism) (DP23S070)
CD Deck Mechanism Assembly Parts List

Refer to the Service Manual • CDA-7865R (Part No. 68E31106S01).

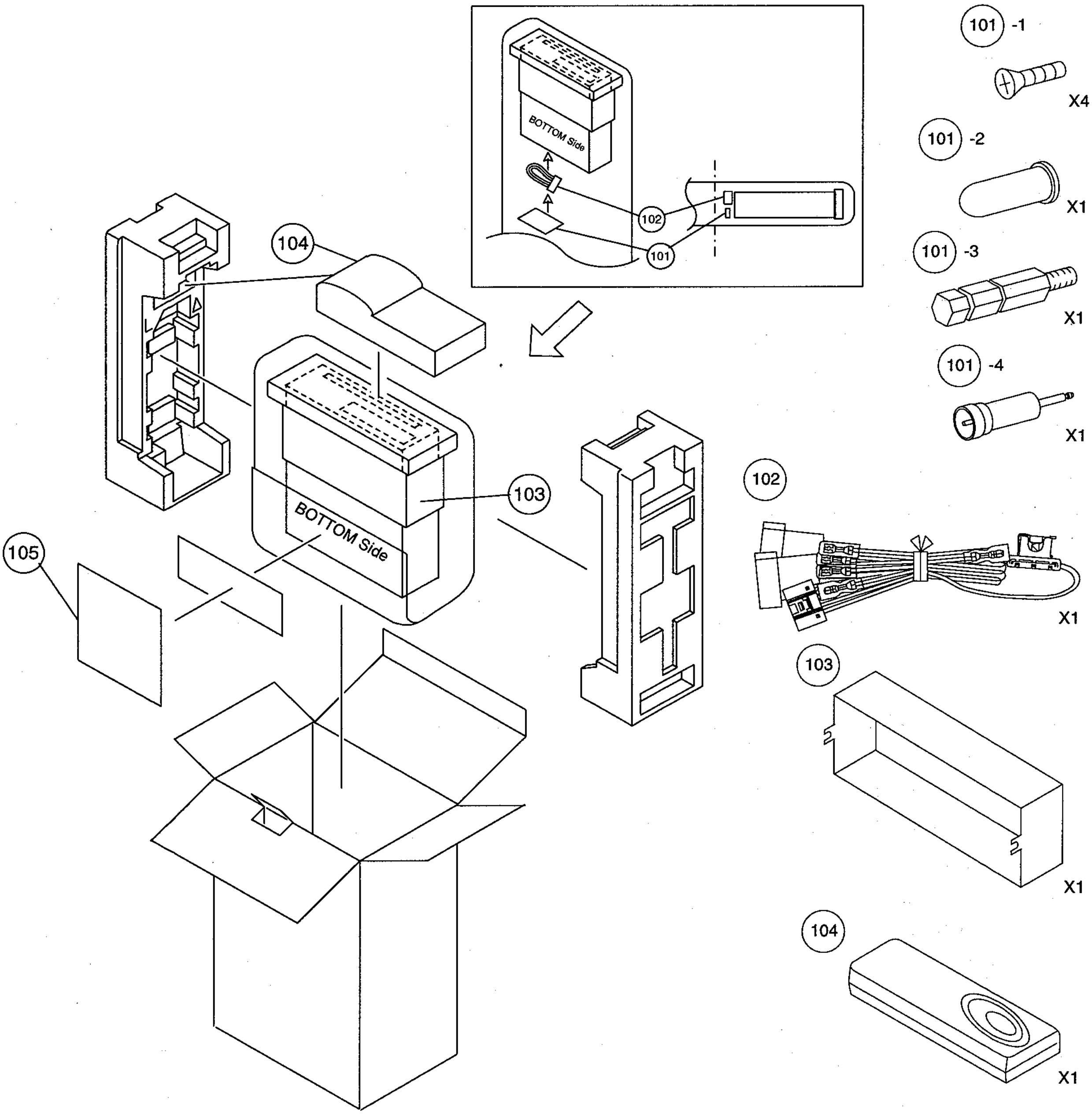
NOTE : Due to continuing product improvement, specifications and designs are subject to change without notice.

Packing Assembly Parts List

Symbol No.	Part No.	Description
101-1	03S72235F13	SCR, MCH M5X8 FLAT
101-2	36A11113W01	CAP, RUBBER (A)
101-3	03A11112W01	BOLT, HEX. M5 (A)
101-4	01T15394Y02	ANT, JASO-ISO
102	01T15359Y03	ASSY, ISO CONN 7837RO

Symbol No.	Part No.	Description
103	15D50406W01	CASE, INNER
104	15D10867Y01	CARRING, CASE
105	68P01149K63	O/M AOEU AODN

Packing Method View


BOTTOM Side
102
101
104
103
BOTTOM Side
105
101 -1
X4
101 -2
X1
101 -3
X1
101 -4
X1
102
X1
103
X1
104
X1

Specifications

<CD SECTION>

System	Optical (Compact Disc System)
Quantizing Bit Number	16bit Linear system
Channels	2 Channels
Channel Balance (1kHz)	0±3dB
Distortion (1kHz)	0.1%
Frequency Response (Ref. 1kHz)	17Hz : 0±3dB
	127Hz : 0±2dB
	10.007kHz : 0±2dB
	19.997kHz : 0±4dB
S/N Ratio	95dB
Separation (1kHz)	55dB
De-Emphasis (Ref. 1kHz)	4kHz : -20±3dB
	16kHz : -20±3dB

<FM RADIO>

Intermediate Frequency	10.7±0.1MHz
Frequency Range	87.5~108MHz
Usable Sensitivity (Mono, 30dB S/N, at 98.1MHz)	20.2dBf
-3dB Limiting Sensitivity (at 98.1MHz)	20.2dBf
Residual Noise (Ref. 400Hz, at 98.1MHz)	25±10dB
S/N Ratio (Stereo, at 98.1MHz)	50dB
Image Rejection (at 106.1MHz)	40dB
IF Rejection (at 90.1MHz)	60dB
Distortion (Input 60dBμ, at 98.1MHz)	1%
Frequency Response (Ref. 400Hz, at 98.1MHz)	100Hz : 0±3dB
	10kHz : -12±3dB
Stereo Separation (1kHz, at 98.1MHz)	20dB
PS Sensitivity (at 98.1MHz)	36.2dBf

<MW RADIO>

Intermediate Frequency	450kHz
Frequency Range	531~1,602kHz
Usable Sensitivity (20dB S/N, at 999kHz)	34dB
S/N Ratio (at 999kHz)	44dB
Image Rejection (at 603kHz)	40dB
IF Rejection (at 603kHz)	40dB
Distortion (at 999kHz)	1.5%
Frequency Response (Ref. 400Hz, at 999kHz)	100Hz : -3±4dB
	4kHz : -12+4, -8dB

<LW RADIO>

Intermediate Frequency	450kHz
Frequency Range	153~281kHz
Usable Sensitivity (20dB S/N, at 216kHz)	38dB
S/N Ratio (at 216kHz)	42dB
Image Rejection (at 270kHz)	40dB
IF Rejection (at 162kHz)	50dB
Distortion (at 216kHz)	1.5%
Frequency Response (Ref. 400Hz, at 216kHz)	100Hz : -3±4dB 4kHz : -12+4, -8dB

<GENERAL>

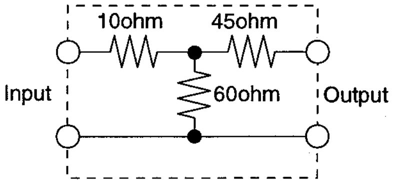
Power Supply	DC14.4V
Power Output (T.H.D. 10%) /Impedance	16W/ch/4ohm
Pre Output (at VOL 25) /Impedance	1.5V/10Kohm
Dimensions (W×H×D)	Chassis : 178×50×158mm Nose : 188×58×26.8mm
Weight	1.5kg

NOTE : Due to Continuing product improvement, specifications and designs are subject to change without notice.

Adjustment Procedures

1. FM SECTION

(1) Dummy Antenna Circuit


10ohm
45ohm
60ohm
Input
Output

For 50 ohm FM Signal Generator

Figure 1

(2) Connections

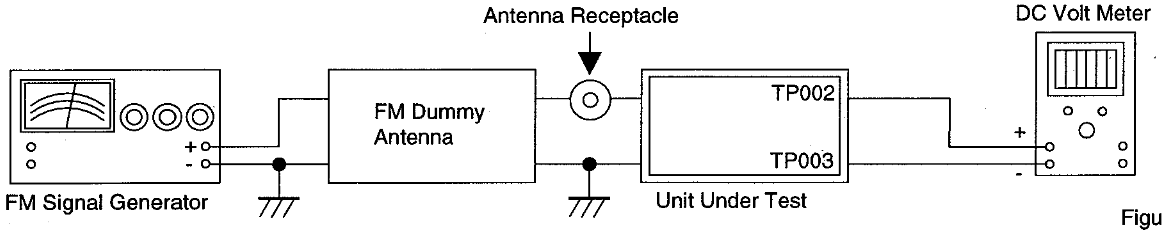

Antenna Receptacle
DC Volt Meter
FM Dummy Antenna
TP002
TP003
+
-
FM Signal Generator
Unit Under Test

Figure 2

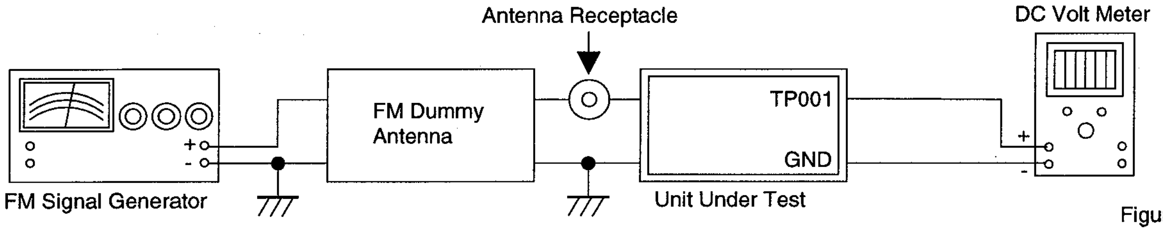

Antenna Receptacle
DC Volt Meter
FM Dummy Antenna
TP001
GND
+
-
FM Signal Generator
Unit Under Test

Figure 3

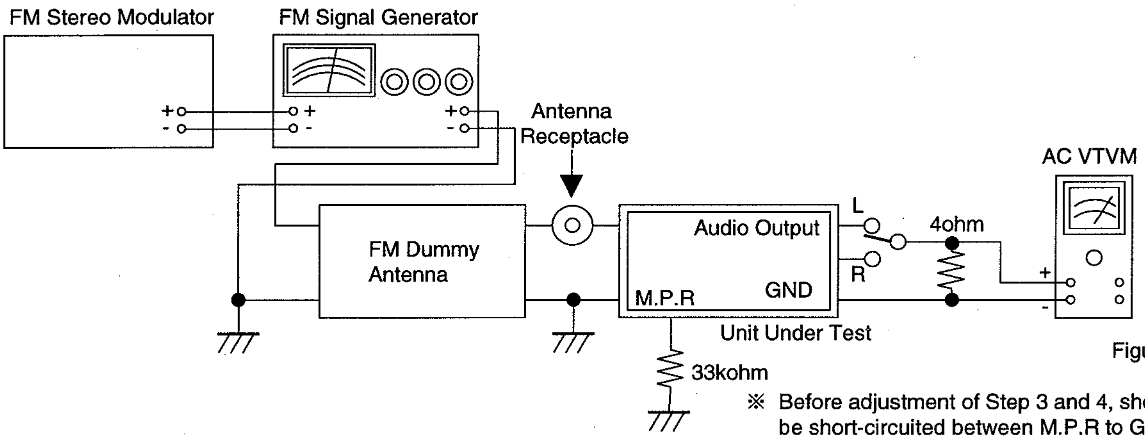

FM Stereo Modulator
FM Signal Generator
Antenna Receptacle
AC VTVM
FM Dummy Antenna
Audio Output
M.P.R
GND
L
R
4ohm
+
-
Unit Under Test
33kohm

Figure 4

※ Before adjustment of Step 3 and 4, should be short-circuited between M.P.R to GND a moment.
(Not short-circuited at adjustment)

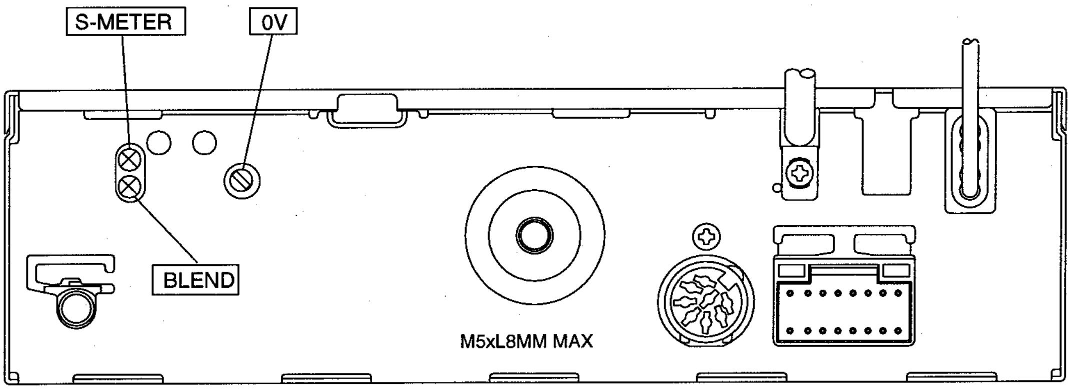
(3) Control Settings

Power Switch	ON	Band Switch	FM
Fader Control	Center Position	BBE Switch	OFF
Balance Control	Center Position	LOUD Switch	OFF
Treble Control	Center Position	Others	OFF
Bass Control	Center Position		

(4) Adjustment Procedures

Step	Description	Connection	Signal Generator	Dial Control	Test Point / P.W.Board Coordinates	Adjustment
1	IF Adjustment	Figure 2	98.1MHz, 72dBμ (Mod. 400Hz, Dev. 40kHz → Mod. OFF)	98.1MHz	TP002 (1-B) TP003 (1-B)	Adjust 0V to 5~15mV.
2	Signal Meter Adjustment	Figure 3	98.1MHz, 46dBμ (Mod. 400Hz, Dev. 40kHz → Mod. OFF)	98.1MHz	TP001 (1-C)	Adjust S-METER to 3.5±0.1V output.
3	Stereo Blend Adjustment (Lch)	Figure 4	98.1MHz, 46dBμ (Mod. 1kHz, Dev. L+R 36kHz, Stereo, Lch only)	98.1MHz	Audio Output M.P.R (1-B)	Adjust BLEND for Lch and Rch output level difference to be 8dB.
4	Stereo Blend Adjustment (Rch)	Figure 4	98.1MHz, 46dBμ (Mod. 1kHz, Dev. L+R 36kHz, Stereo, Rch only)	98.1MHz	Audio Output M.P.R (1-B)	Proceed same adjustment under step 3.

Adjustment Locations

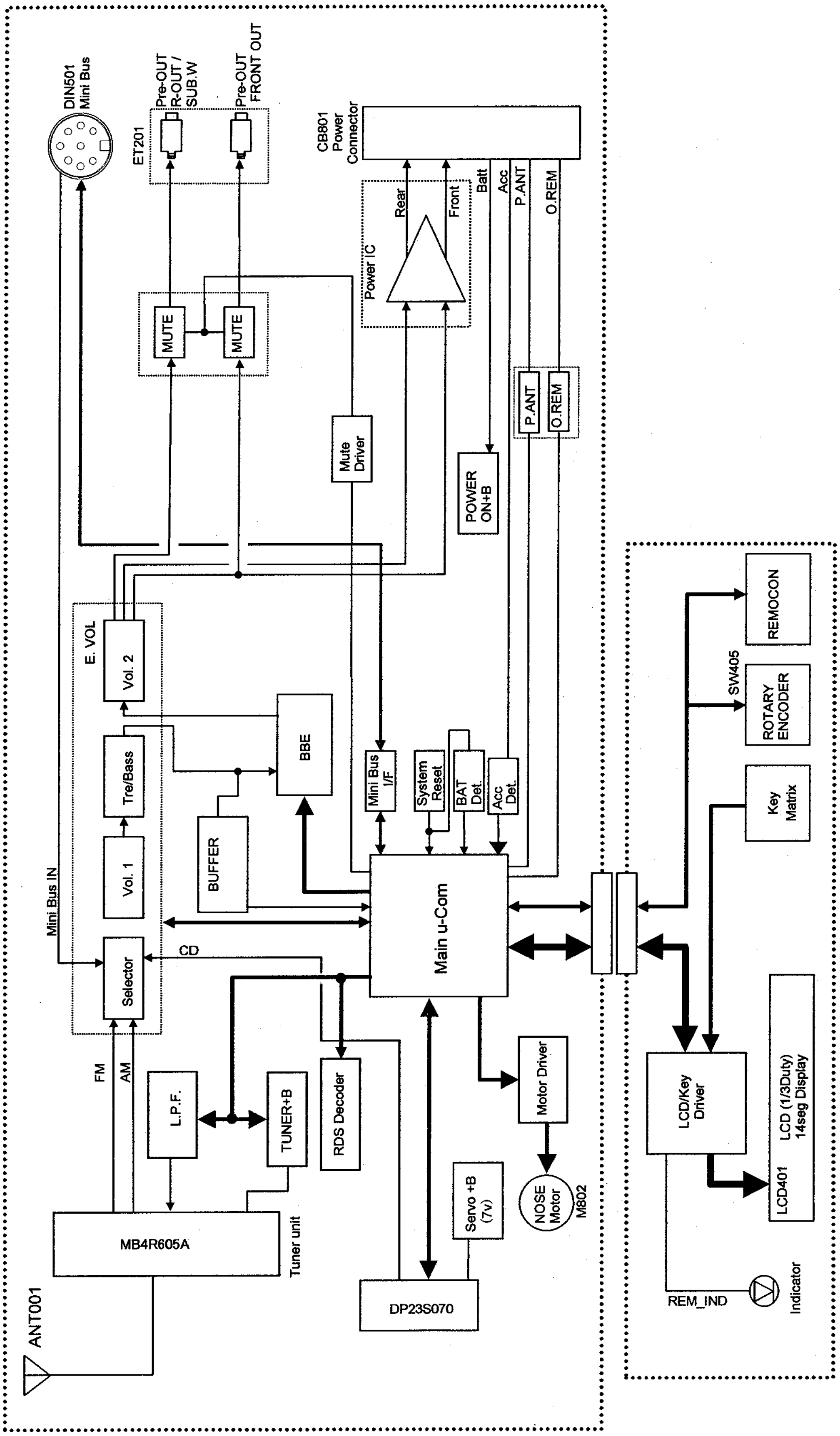


(Rear Side View)

NOTE : For the Test Points, refer to the Parts Layout on P.W.Boards and Wiring Diagram.

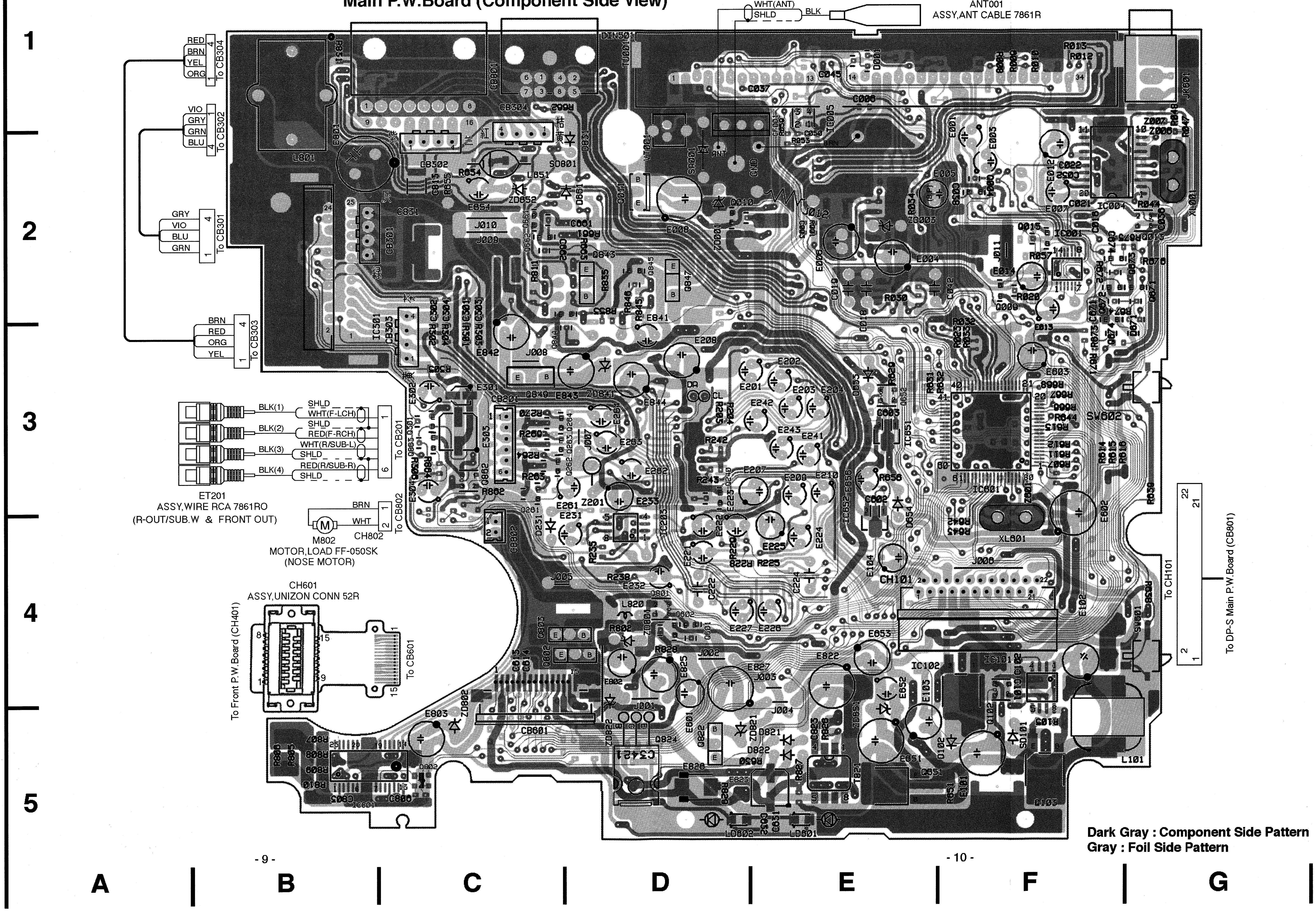
CDM-7861R

Block Diagram


DIN501
Mini Bus
ET201
Pre-OUT
R-OUT /
SUB.W
Pre-OUT
FRONT OUT
CB801
Power
Connector
Rear
Front
Power IC
Batt
Acc
P.ANT
O.REM
MUTE
MUTE
Mute
Driver
POWER
ON+B
P.ANT
O.REM
E. VOL
Vol. 2
Tre/Bass
Vol. 1
Selector
BBE
BUFFER
Mini Bus
I/F
System
Reset
BAT
Det.
Acc
Det.
Main u-Com
Mini Bus IN
CD
FM
AM
L.P.F.
TUNER+B
RDS Decoder
Motor Driver
NOSE
Motor
M802
Servo +B
(7v)
MB4R605A
Tuner unit
DP23S070
ANT001
REMOCON
SW405
ROTARY
ENCODER
Key
Matrix
LCD/Key
Driver
LCD401
LCD (1/3Duty)
14seg Display
REM_IND
Indicator

Parts Layout on P.W.Boards and Wiring Diagram (1/3)

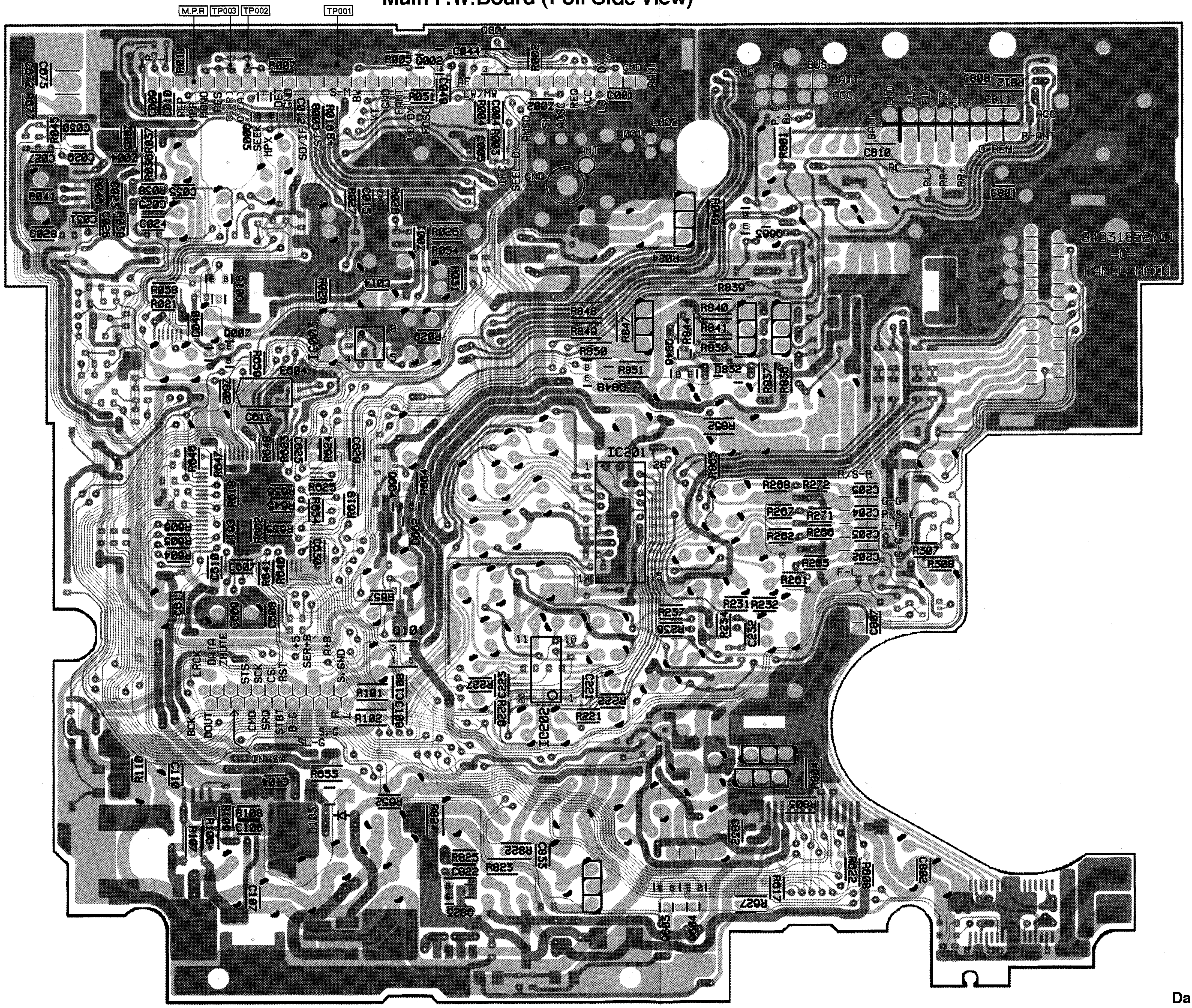
Main P.W.Board (Component Side View)


1
2
3
4
5
A
B
C
D
E
F
G
WHT(ANT)
SHLD
BLK
ANT001
ASSY,ANT CABLE 7861R
RED
BRN
YEL
ORG
To CB304
VIO
GRY
GRN
BLU
To CB302
GRY
VIO
BLU
GRN
To CB301
BRN
RED
ORG
YEL
To CB303
BLK(1)
BLK(2)
BLK(3)
BLK(4)
SHLD
WHT(F-LCH)
RED(F-RCH)
WHT(R/SUB-L)
RED(R/SUB-R)
To CB201
ET201
ASSY,WIRE RCA 7861RO
(R-OUT/SUB.W & FRONT OUT)
BRN
WHT
M
To CB802
M802
CH802
MOTOR,LOAD FF-050SK
(NOSE MOTOR)
CH601
ASSY,UNIZON CONN 52R
To Front P.W.Board (CH401)
To CB601
To CH101
To DP-S Main P.W.Board (CB801)
L801
CB801
DIN501
TU001
CB304
CB302
CB301
CB201
IC501
IC001
IC004
IC005
IC601
IC651
IC652
IC101
IC102
IC801
CB601
CH101
JK001
XL001
XL601
SW601
SW602
L101
LD601
LD602

Dark Gray : Component Side Pattern
Gray : Foil Side Pattern

Parts Layout on P.W.Boards and Wiring Diagram (2/3)

Main P.W.Board (Foil Side View)

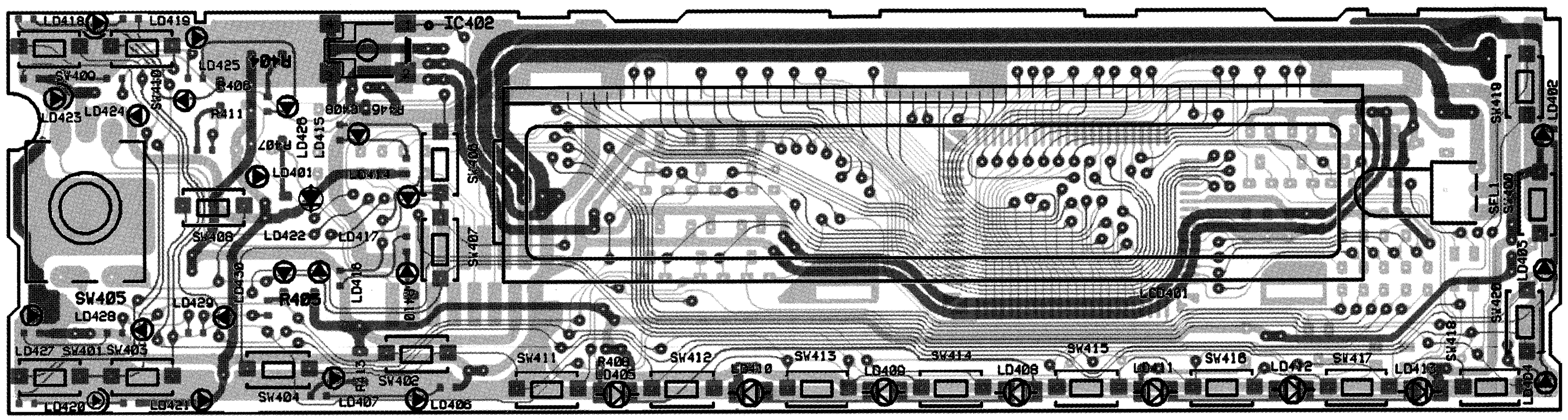

1
2
3
4
5
A
B
C
D
E
F
G
M.P.R
TP003
TP002
TP001
Q001
C044
R002
Q002
R005
R007
R011
C010
C009
REP
MPX
MONO
RES
SEEK
HPX
S-M
BW
GND
FANT
LD/DX
FOSC
R051
C043
LW/MW
AF
DX
VT
GND
AANT
C001
L002
L001
ANT
AMSD
SEEL_DX
IFC
RSSI
C072
R027
R045
C030
C027
C020
R041
C028
C031
R046
R037
R039
C024
C014
R054
R025
R031
R038
R021
C040
Q016
Q007
IC003
R036
E604
C012
R040
R047
R018
R033
R034
R020
R019
R023
R029
R004
R003
R008
C007
C010
C011
C009
C008
Q101
R057
R101
R102
C108
LRCK
DATA
ZMUTE
STS
SCK
CS
RST
SER+B
A+B
S.GND
BCK
DOUT
CHO
SRQ
STB
B-G
SL-G
S.G
IN-SW
R110
C013
R053
R108
C106
D103
R052
R824
R825
C822
R823
R822
C823
R027
R017
R022
R808
C802
C803
R804
R805
Q803
S.G
R
BUS
BATT
ACC
GND
FL-
FL+
FR-
FR+
C808
R812
C811
ACC
P-ANT
O-REM
R801
C810
RL-
RL+
RR-
RR+
C801
Q805
R804
84031852Y01
-0-
PANEL-MAIN
R839
R840
R841
R838
R848
R849
R850
R851
R847
R844
Q846
Q848
D832
R837
R836
R852
IC201
1
28
14
15
R865
R/S-R
R268
R272
C203
G-G
R267
R271
C204
R/S-L
F-R
R262
R266
C205
R265
C202
G-G
R307
R308
R261
F-L
R231
R232
R237
R234
R236
C232
C807
IC202
11
10
20
1
R227
C225
R220
C221
R222
R221

Dark Gray : Component Side Pattern
Gray : Foil Side Pattern

Parts Layout on P.W.Boards and Wiring Diagram (3/3)

1

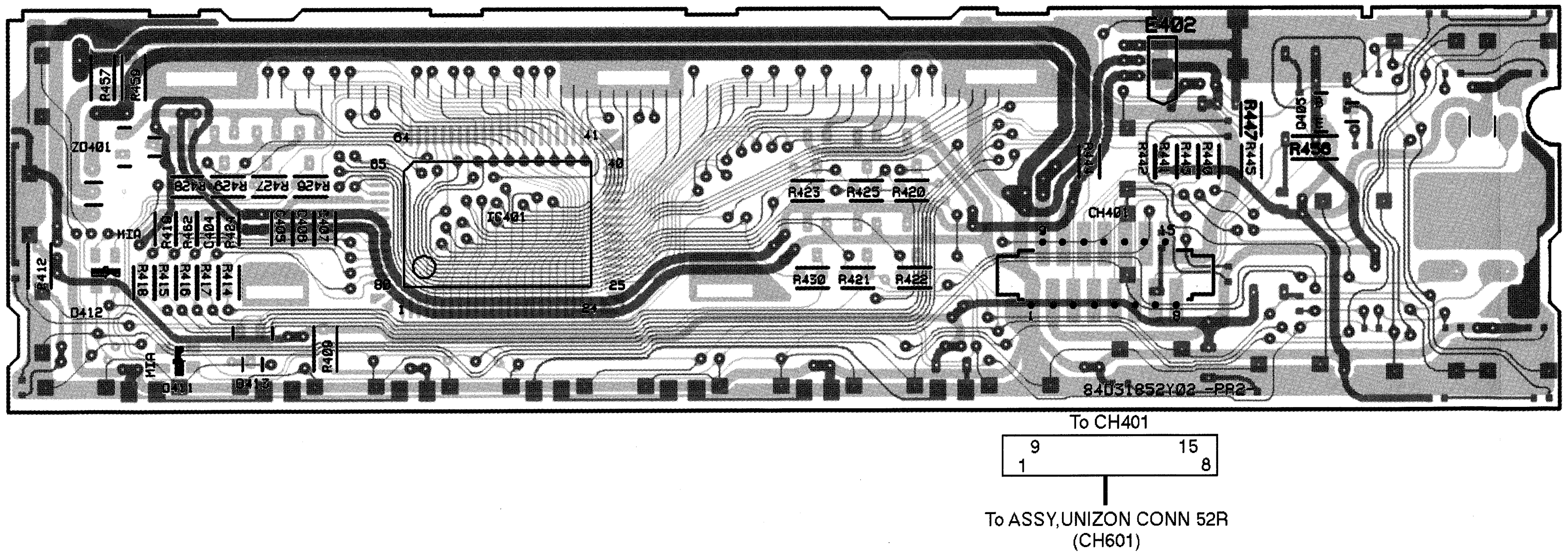
Front P.W.Board (Component Side View)


IC402
LD418
LD419
LD425
LD423
LD424
LD426
LD415
LD401
LD422
LD417
LD416
LD427
LD428
LD429
LD420
LD421
LD407
LD406
LD405
LD410
LD409
LD408
LD411
LD412
LD413
LD402
LD403
LD404
SW400
SW401
SW402
SW403
SW404
SW405
SW406
SW407
SW408
SW409
SW410
SW411
SW412
SW413
SW414
SW415
SW416
SW417
SW418
SW419
SW420
R403
R405
R406
R407
R411
LCD401
SEL1

2

3

Front P.W.Board (Foil Side View)


E402
R457
R458
ZD401
IC401
R423
R425
R420
R430
R421
R422
R428
R429
R427
R426
R410
R418
R415
R416
R417
R414
R409
R412
D412
D411
MIR
R447
R445
R442
R456
CH401
84031052Y02 PR2
To CH401
9
15
1
8
To ASSY,UNIZON CONN 52R
(CH601)

4

5

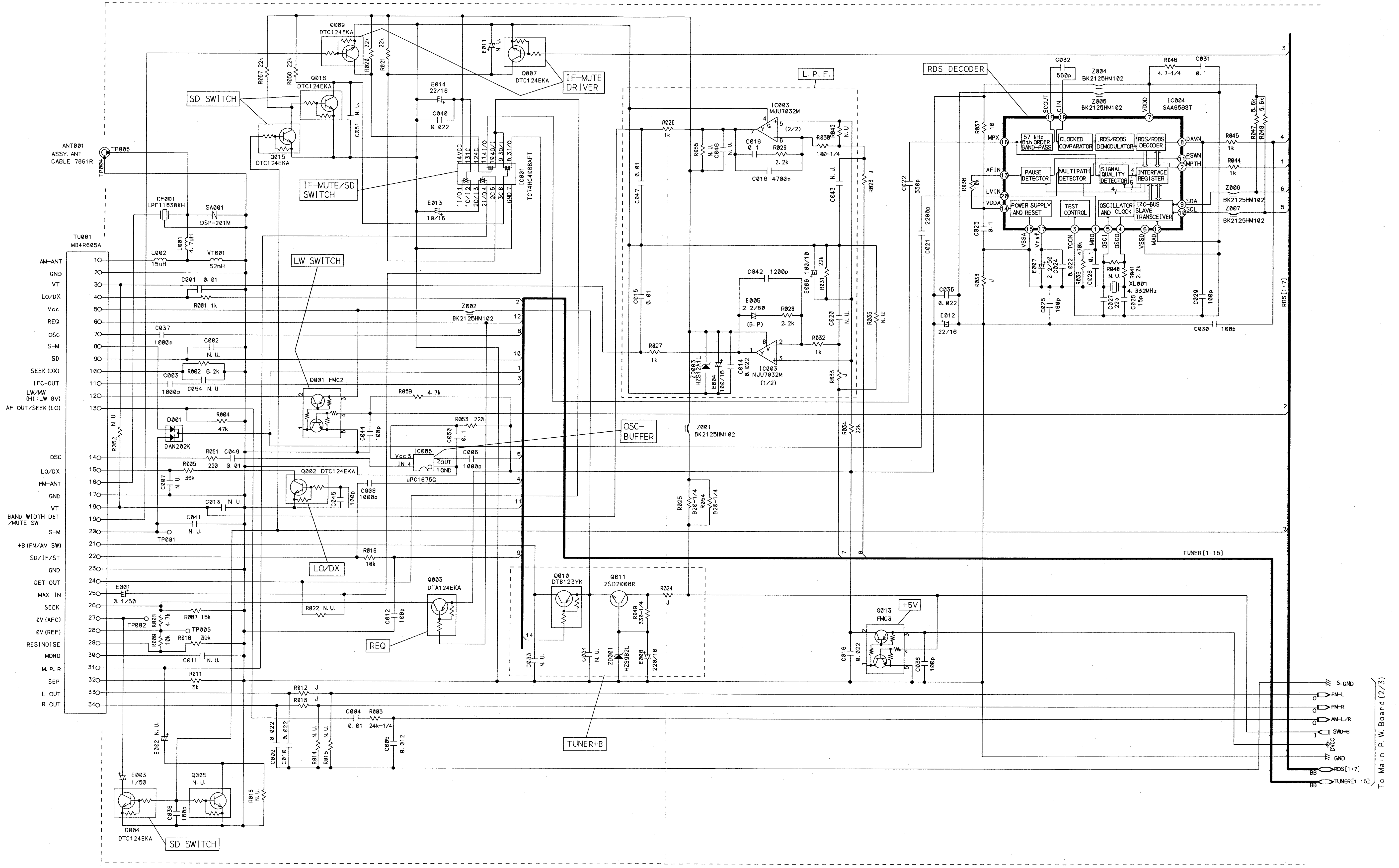
Dark Gray : Component Side Pattern
Gray : Foil Side Pattern

A | B | C | D | E | F | G

CDM-7861R

Schematic Diagram (1/4)

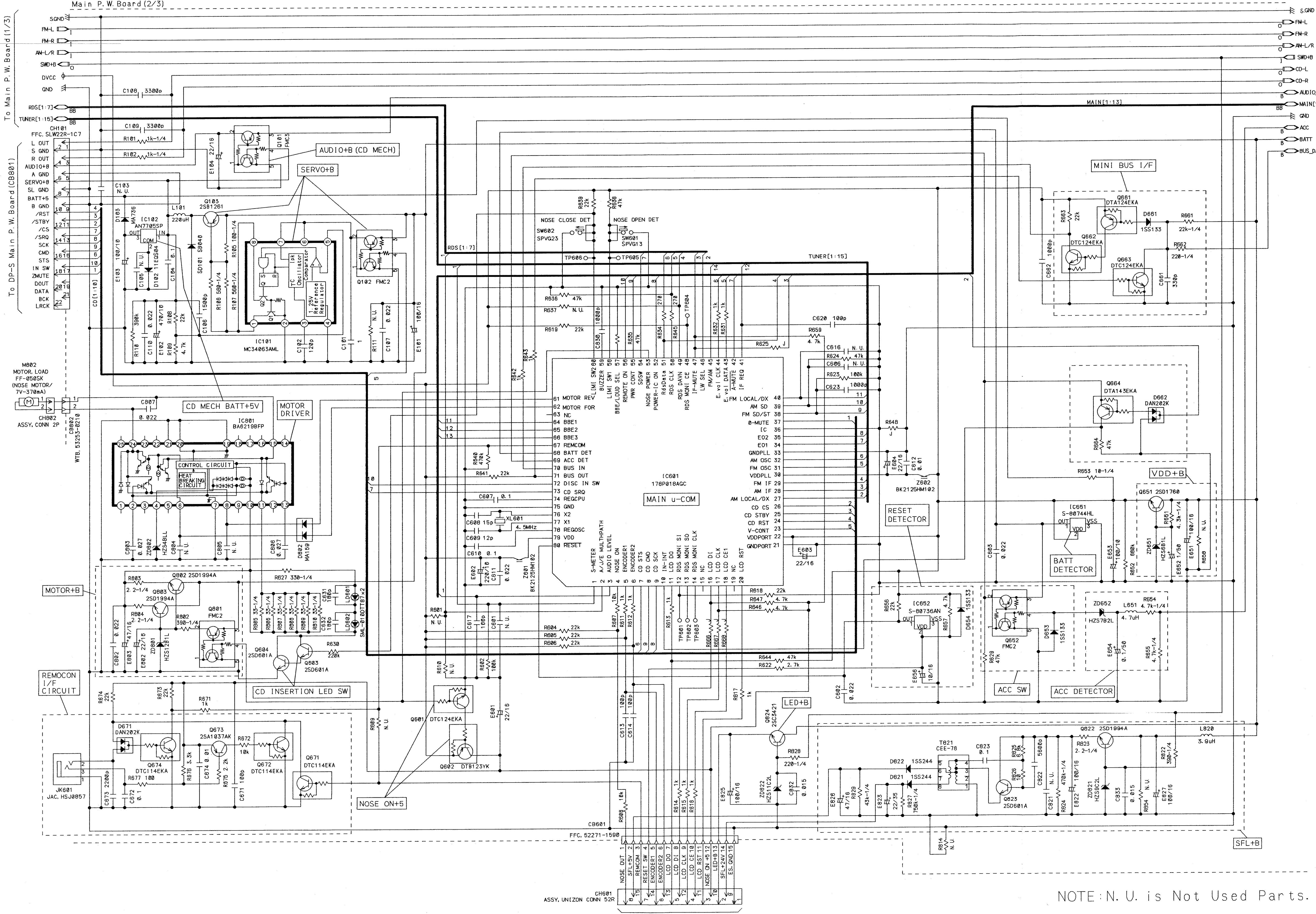
Main P. W. Board (1/3)


ANT001
ASSY. ANT CABLE 7861R
TP005
TP004
CF001 LPF11830KH
SA001 DSP-201M
L001 4.7uH
L002 15uH
VT001 52mH
TU001 MB4R605A
AM-ANT
GND
VT
LO/DX
Vcc
REQ
OSC
S-M
SD
SEEK (DX)
IFC-OUT
LW/MW (HI:LW 8V)
AF OUT/SEEK (LO)
OSC
LO/DX
FM-ANT
GND
VT
BAND WIDTH DET /MUTE SW
S-M
+B (FM/AM SW)
SD/IF/ST
GND
DET OUT
MAX IN
SEEK
0V (AFC)
0V (REF)
RES(NOISE
MONO
M.P.R
SEP
L OUT
R OUT
C001 0.01
R001 1k
C037 1000p
C002 N.U.
R002 8.2k
C003 1000p
C054 N.U.
D001 DAN202K
R004 47k
R052 N.U.
R051 220
C049 0.01
R005 36k
C007 N.U.
C013 N.U.
C041 N.U.
TP001
E001 0.1/50
TP002
R006 4.7k
R007 15k
TP003
R009 10k
R010 39k
C011 N.U.
R011 3k
E002 N.U.
E003 1/50
Q004 DTC124EKA
Q005 N.U.
C038 100p
R018 N.U.
SD SWITCH
Q009 DTC124EKA
R057 22k
R058 22k
R020 22k
R021 22k
Q016 DTC124EKA
Q015 DTC124EKA
C051 N.U.
E014 22/16
C040 0.022
E013 10/16
E011 N.U.
Q007 DTC124EKA
IF-MUTE DRIVER
IF-MUTE/SD SWITCH
IC001 TC74HC4066AFT
LW SWITCH
Q001 FMC2
R059 4.7k
C044 100p
R053 220
C050 0.1
IC005 uPC1675G
C006 1000p
OSC-BUFFER
Q002 DTC124EKA
C045 100p
C008 1000p
LO/DX
R016 10k
R022 N.U.
Q003 DTA124EKA
C012 100p
REQ
Z002 BK2125HM102
R012 J
R013 J
C009 0.022
C010 0.022
R014 N.U.
R015 N.U.
C004 0.01
R003 24k-1/4
C005 0.012
Q010 DTB123YK
Q011 2SD2000R
R024 J
R049 330-1/4
ZD001 HZS9B2L
E008 220/10
C033 N.U.
C034 N.U.
TUNER+B
L.P.F.
IC003 MJU7032M (2/2)
R026 1k
R055 N.U.
C046 N.U.
C019 0.1
R029 2.2k
C018 4700p
R030 100-1/4
R042 N.U.
C047 0.01
C043 N.U.
R023 J
C042 1200p
E006 100/10
R031 22k
E005 2.2/50 (B.P)
R028 2.2k
C015 0.01
R027 1k
ZD003 HZS12A1L
E004 100/16
C014 0.022
IC003 NJU7032M (1/2)
R032 1k
C020 N.U.
R035 N.U.
R033 J
Z001 BK2125HM102
R034 22k
R025 820-1/4
R054 820-1/4
Q013 FMC3
+5V
C016 0.022
C036 100p
RDS DECODER
C032 560p
Z004 BK2125HM102
Z005 BK2125HM102
R046 4.7-1/4
C031 0.1
IC004 SAA6588T
SCOUT
CIN
VDDD
MPX
57 kHz 8th ORDER BAND-PASS
CLOCKED COMPARATOR
RDS/RDBS DEMODULATOR
RDS/RDBS DECODER
DAVN
PSWN
MPTH
AFIN
PAUSE DETECTOR
MULTIPATH DETECTOR
SIGNAL QUALITY DETECTOR
INTERFACE REGISTER
LVIN
VDDA
POWER SUPPLY AND RESET
TEST CONTROL
OSCILLATOR AND CLOCK
I2C-BUS SLAVE TRANSCEIVER
SDA
SCL
VSSA
Vref
TCON
MRO
OSCI
OSCO
VSSD
MAD
R037 10
R036 10k
C022 330p
C021 2200p
C023 0.1
R038 J
E007 2.2/50
C024 0.022
R039 470k
C026 0.1
C025 100p
R040 N.U.
R041 2.2k
XL001 4.332MHz
C027 22p
C028 15p
C029 100p
C030 100p
C035 0.022
E012 22/16
R045 1k
R044 1k
R047 5.6k
R048 5.6k
Z006 BK2125HM102
Z007 BK2125HM102
RDS[1:7]
TUNER[1:15]
S-GND
FM-L
FM-R
AM-L/R
SWD+B
DVCC
GND
RDS[1:7]
TUNER[1:15]
To Main P. W. Board (2/3)

NOTE: N. U. is Not Used Parts.

Schematic Diagram (2/4)

Main P.W. Board (2/3)

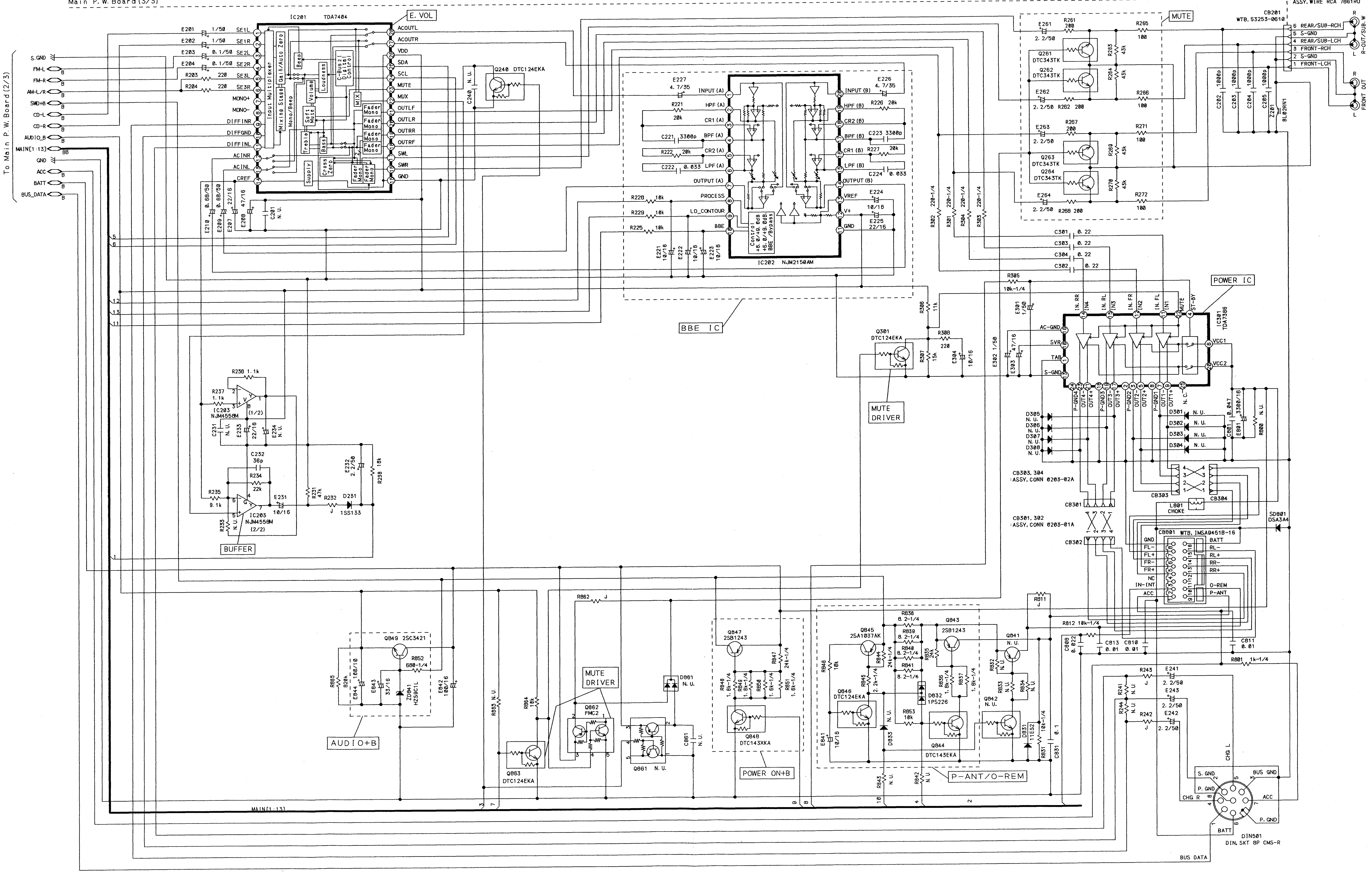

To Main P.W. Board (1/3)
To Main P.W. Board (3/3)
To DP-S Main P.W. Board (CB801)
SGND
FM-L
FM-R
AM-L/R
SWD+B
DVCC
GND
RDS[1:7]
TUNER[1:15]
CH101
FFC, SLW22R-1C7
L OUT
S GND
R OUT
AUDIO+B
A GND
SERVO+B
SL GND
BATT+5
B GND
/RST
/STBY
/CS
/SRQ
SCK
CMD
STS
IN SW
ZMUTE
DOUT
DATA
BCK
LRCK
S.GND
CD-L
CD-R
AUDIO_B
MAIN[1:13]
ACC
BATT
BUS_DATA
AUDIO+B (CD MECH)
SERVO+B
IC102
AN7705SP
IC101
MC34063AML
Q101
FMC3
Q102 FMC2
Q103
2SB1261
L101
220uH
D101
SB040
D103
MA736
C108 3300p
C109 3300p
R101 1k-1/4
R102 1k-1/4
M802
MOTOR, LOAD
FF-050SK
(NOSE MOTOR/
7V-370mA)
CH802
ASSY, CONN 2P
CB802
WTB, 53253-0210
CD MECH BATT+5V
MOTOR DRIVER
IC801
BA6219BFP
CONTROL CIRCUIT
HEAT BREAKING CIRCUIT
MOTOR+B
Q802 2SD1994A
Q803 2SD1994A
Q801 FMC2
ZD801 HZS12B1L
D802 MA160
LD801
LD802
SML-010DT81x2
Q603 2SD601A
Q604 2SD601A
CD INSERTION LED SW
REMOCON I/F CIRCUIT
JK601
JAC, HSJ0857
D671 DAN202K
Q673 2SA1037AK
Q674 DTC114EKA
Q672 DTC114EKA
Q671 DTC114EKA
NOSE ON+5
Q601 DTC124EKA
Q602 DTB123YK
NOSE CLOSE DET
NOSE OPEN DET
SW602 SPVG23
SW601 SPVG13
TP606
TP605
IC601
178P018AGC
MAIN u-COM
XL601 4.5MHz
Z601 BK2125HM102
Z602 BK2125HM102
MINI BUS I/F
Q661 DTA124EKA
Q662 DTC124EKA
Q663 DTC124EKA
D661 1SS133
Q664 DTA143EKA
D662 DAN202K
VDD+B
Q651 2SD1760
ZD651 HZS5B1L
IC651 S-80744HL
BATT DETECTOR
RESET DETECTOR
IC652 S-80736AN
D654 1SS133
Q652 FMC2
D653 1SS133
ACC SW
ACC DETECTOR
ZD652 HZS7B2L
L651 4.7uH
LED+B
Q824 2SC3421
ZD822 HZS11C2L
T821 CEE-78
D822 1SS244
D821 1SS244
Q823 2SD601A
Q822 2SD1994A
ZD821 HZS9C2L
L820 3.9uH
SFL+B
CB601
FFC, 52271-1590
CH601
ASSY, UNIZON CONN 52R
NOSE OUT
SFL+5V
REMCOM
RESET SW
ENCODER1
ENCODER2
LCD DI
LCD CLK
LCD CE
LCD RST
NOSE ON +5
LED+B
SFL+24V
ES-GND
From Front P.W. Board (CH401)

NOTE: N. U. is Not Used Parts.

CDM-7861R

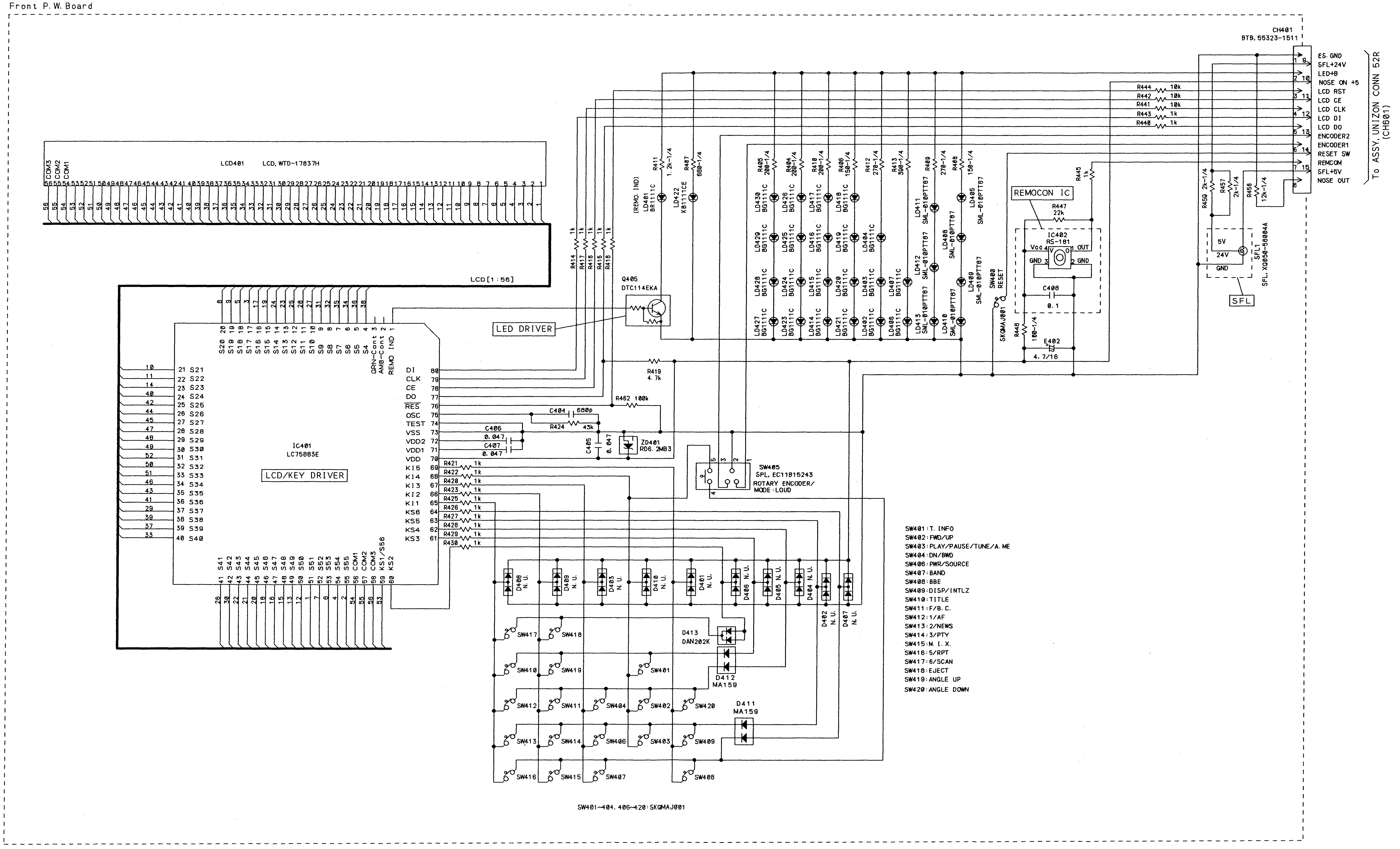
Schematic Diagram (3/4)

Main P. W. Board (3/3)


IC201 TDA7404
E. VOL
Q240 DTC124EKA
BBE IC
IC202 NJM2150AM
MUTE
Q261 DTC343TK
Q262 DTC343TK
Q263 DTC343TK
Q264 DTC343TK
ET201 ASSY, WIRE RCA 7861RO
CB201 WTB, 53253-0610
6 REAR/SUB-RCH
5 S-GND
4 REAR/SUB-LCH
3 FRONT-RCH
2 S-GND
1 FRONT-LCH
R-OUT/SUB.W
FRONT OUT
POWER IC
IC301 TDA7386
Q301 DTC124EKA
MUTE DRIVER
IC203 NJM4558M (1/2)
IC203 NJM4558M (2/2)
BUFFER
D231 1SS133
CB303, 304 :ASSY, CONN 0203-02A
CB301, 302 :ASSY, CONN 0203-01A
L801 CHOKE
SD801 DSA3A4
CB801 WTB, IMSA9451B-16
GND
FL-
FL+
FR-
FR+
NC
IN-INT
ACC
BATT
RL-
RL+
RR-
RR+
O-REM
P-ANT
Q849 2SC3421
ZD841 HZS9C1L
AUDIO+B
Q862 FMC2
Q863 DTC124EKA
Q861 N. U.
D861 N. U.
MUTE DRIVER
Q847 2SB1243
Q848 DTC143XKA
POWER ON+B
Q845 2SA1037AK
Q843 2SB1243
Q846 DTC124EKA
Q844 DTC143EKA
Q841 N. U.
Q842 N. U.
D832 1PS226
D831 11ES2
P-ANT/O-REM
DIN501 DIN, SKT 8P CMS-R
S. GND
BUS GND
P. GND
ACC
CHG R
CHG L
P. GND
BATT
BUS DATA
MAIN[1:13]
To Main P. W. Board (2/3)
S.GND
FM-L
FM-R
AM-L/R
SWD+B
CD-L
CD-R
AUDIO_B
MAIN[1:13]
GND
ACC
BATT
BUS_DATA

NOTE: N. U. is Not Used Parts.

Schematic Diagram (4/4)


Front P.W. Board
LCD401 LCD, WTD-17837H
COM3
COM2
COM1
LCD[1:56]
IC401
LC75883E
LCD/KEY DRIVER
DI
CLK
CE
DO
RES
OSC
TEST
VSS
VDD2
VDD1
VDD
KI5
KI4
KI3
KI2
KI1
KS6
KS5
KS4
KS3
GRN-Cont
AMB-Cont
REMO IND
Q405
DTC114EKA
LED DRIVER
R419 4.7k
R462 100k
C404 680p
R424 43k
C406 0.047
C407 0.047
C405 0.047
ZD401 RD6.2MB3
SW405
SPL, EC11B15243
ROTARY ENCODER/
MODE·LOUD
LD401 BG1111C
(REMO. IND)
LD422 KB1111CE
R411 1.2k-1/4
R407 680-1/4
REMOCON IC
IC402
RS-181
Vcc
GND
OUT
R447 22k
C408 0.1
E402 4.7/16
R445 1k
R440 100-1/4
SW400 RESET
SKQMAJ001
R444 10k
R442 10k
R441 10k
R443 1k
R440 1k
CH401
BTB, 55323-1511
ES. GND
SFL+24V
LED+B
NOSE ON +5
LCD RST
LCD CE
LCD CLK
LCD DI
LCD DO
ENCODER2
ENCODER1
RESET SW
REMCOM
SFL+5V
NOSE OUT
To ASSY. UNIZON CONN 52R
(CH601)
R459 2k-1/4
R457 2k-1/4
R458 12k-1/4
5V
24V
GND
SFL1
SFL, XQ050-56004A
SFL
D413
DAN202K
D412
MA159
D411
MA159
D402 N.U.
D407 N.U.
SW401:T. INFO
SW402:FWD/UP
SW403:PLAY/PAUSE/TUNE/A. ME
SW404:DN/BWD
SW406:PWR/SOURCE
SW407:BAND
SW408:BBE
SW409:DISP/INTLZ
SW410:TITLE
SW411:F/B. C.
SW412:1/AF
SW413:2/NEWS
SW414:3/PTY
SW415:M. I. X.
SW416:5/RPT
SW417:6/SCAN
SW418:EJECT
SW419:ANGLE UP
SW420:ANGLE DOWN
SW401-404, 406-420:SKQMAJ001

NOTE. N. U. is Not Used Parts.

Terminal Voltage of IC/TR

IC001

1, 2	0V
3, 4	1.8V
5, 6	11.8V
7	0V
8~11	3.3V
12, 13	11.8V
14	12.1V

IC003

1	2.9V	FM 98.1MHz
2, 3	2.5V	
4	0V	
5, 6	2.5V	
7	3.9V	
8	12V	

IC004

1	0.2V	12	0V
2	0.3V	13	2.5V
3	0V	14	4.9V
4	2.3V	15	0V
5	1.5V	16	2.3V
6	0V	17	2.4V
7, 8	5V	18	2.5V
9, 10	PS	19	2.2V
11	5V	20	2.4V

IC005

1	0V
2	PS
3	3.4V
4	PS

IC101

1	PS	CD ON
2	0V	
3	0.6V	
4	0V	
5	1.3V	
6, 7	14.3V	
8	PS	

IC102

1	7.2V	CD ON
2	0.2V	
3	5.1V	

IC201

1~6	4.4V
7, 8	NC
9~14	4.4V
15	0V
16~22	4.4V
23	5V
24, 25	0V
26	8.8V
27, 28	4.4V

IC202

1~7	4.5V
8	0V
9, 10	4.8V
11	0V
12	8.8V
13~20	4.5V

IC203

1~3	4.5V
4	0V
5~7	4.5V
8	8.8V

IC301

1, 2	0V	14~16	7.2V
3	7.3V	17	7.3V
4	5.1V	18	0V
5	7.3V	19	7.3V
6	14.4V	20	14.4V
7	7.3V	21	7.3V
8	0V	22	5.1V
9, 10	7.3V	23	7.3V
11, 12	7.2V	24	0V
13	0V	25	NC

IC401

1	5.1V
2, 3	NC
4~59	PS
60~64	5.3V
65~69	0V
70	5.3V
71	3.6V
72	1.9V
73, 74	0V
75	PS
76	4.7V
77	5.3V
78~80	PS

IC402

1	4.2V
2, 3	0V
4	5.2V

IC651

1	5.2V
2	4.9V
3	0V

IC652

1, 2	5.1V
3	0V

IC801

1	NC	13	0V
2	0V	14	NC
3	NC	15	0V
4	3.4V	16~18	NC
5	NC	19~21	0V
6~8	0V	22, 23	NC
9	NC	24	0V
10, 11	10.5V	25	NC
12	NC		

IC601

1	4.4V	FM 98.1MHz 60dBμ	39	0V	
2	0.3V		40, 41	5.1V/ 0V	Only FM LOCAL SEEK
3	0.8V	FM 98.1MHz 60dBμ	42	5V	
4	2.5V		43, 44	0V	
5, 6	5.1V		45	8.5V/ 0V	Only AM
7, 8	PS / 0V	CD / RADIO	46, 47	0V	
9	PS / 5.1V	CD / RADIO	48, 49	5.1V	
10	0V		50, 51	PS	
11	5V		52~56	5.1V	
12	0V		57	0V	
13~15	NC		58	0V / 5.1V	Full Open / Others
16~18	PS		59	0V	
19	NC		60	0V/ 5.1V	Full Close / Others
20	5.1V		61, 62	0V	
21	0V		63	NC	
22	5.1V		64	5.1V	BBE 2
23	5.1V / 0V	CD / RADIO	65	0V	BBE 2
24	5V		66	5.1V	BBE 2
25, 26	5.1V / 0V	CD / RADIO	67	4.8V	
27	5.1V	Only AM LOCAL SEEK	68, 69	4.9V	
28	2.1V		70, 71	PS	
29	2.5V		72	5.1V / 0V	DISC IN / OUT
30	5.1V		73	PS	
31	2.1V	FM	74	3.6V	
32	1.4V	AM	75	0V	
33	0V		76, 77	PS	
34	2.4V		78	3.6V	
35~37	0V		79, 80	5.1V	
38	4.3V / 0V	FM MONO / STEREO			

Q101

1	NC	
2	8.7V / 0V	CD ON / OFF
3	8.8V	
4	7.2V / 0V	CD ON / OFF
5	0V	

Q102

1	NC	
2	14.3V / 0V	CD ON / OFF
3	14.4V	
4	5.1V / 0V	CD ON / OFF
5	0V	

	1	2	3	4	5	MODE
Q001	0V / 8.4V	8.3V / 0V	8.3V	5V / 0V	0V	LW / Others
Q013	NC	5.2V	5.2V	14.3V	0V	
Q652	NC	4.9V	4.9V	5.8V	0V	
Q801	NC	14.3V	14.4V	5.1V	0V	
Q862	NC	0V / 14.3V	14.4V	0V / 4.6V	0V	MUTE / Others

	E	C	B	MODE
Q002	0V	0V / 4.3V	5.1V / 0V	FM LOCAL SEEK / Others
Q003	5.1V	3.3V / 5.1V	5.1V / 0V	SEEK / Others
Q004	0V	0V	5V	
Q007	0V	12V	0V	
Q009	0V	11.7V	0V	
Q010	8.6V	8.5V / 0V	0.2V / 8.6V	FM / AM
Q011	8.6V	14.3V	9.2V	
Q015	0V	0V	5.1V	
Q016	0V	11.7V	0V	
Q103	14.4V	PS	14V	CD ON
Q240	0V	4.9V	0V	
Q261	0V	0V	14.3V/ 0V	MUTE / Others
Q262	0V	0V	14.3V / 0V	MUTE / Others
Q263	0V	0V	14.3V / 0V	MUTE / Others
Q264	0V	0V	14.3V / 0V	MUTE / Others
Q301	0V	5.1V / 0V	0V / 4.7V	MUTE / Others
Q405	0V	0.1V	5V	
Q601	0V	0.1V	5.1V	
Q602	5.2V	5.2V	0.1V	
Q603	0.7V	7.9V	1.2V	NOSE OPEN
Q604	0V	7.9V	0.7V	NOSE OPEN
Q651	5.2V	14.3V	5.7V	
Q661	5.2V	PS	PS	
Q662	0V	PS	PS	
Q663	0V	PS	PS	
Q664	5V	5V / 0V	2.8V / 5V	INTERRUPT / Others
Q671	0V	0V	2.9V	
Q672	0V	0V	0V	
Q673	5.1V	0V	5.1V	
Q674	0V	4.8V	0V	
Q802	11.5V	14.4V	12.1V	
Q803	11.5V	14.4V	12.1V	
Q822	9.2V	14.3V	9.8V	
Q823	PS	9V	PS	
Q824	11.4V	14.3V	12V	
Q843	14.3V	14.3V	13.6V	
Q844	0V	0V	4.8V	
Q845	14.4V	0V	14.4V	
Q846	0V	14.3V	0V	
Q847	14.4V	14.4V	13.7V	
Q848	0V	0.1V	5.1V	
Q849	8.9V	14.4V	9.5V	
Q863	0V	0V / 4.7V	5.1V / 0V	MUTE / Others

[Measuring Conditions]

- Power Supply Voltage : DC14.4V
- Measuring Meter : Digital Multi Voltmeter
- Measuring Point Reference : Between GND
- Measuring Conditions : FM : 98.1MHz
  AM : 1,000KHz
  CD : at Playing Disc

Description of IC Terminal

178P018AGC : IC601

No.	Symbol	I/O	Terminal Description
1	S-METER	I	Signal Meter input terminal.
2	MULTIPATH	I	Multipath rejection detect input terminal.
3	AUDIO LEVEL	I	Audio Level signal input terminal.
4	NOSE ON	I	Front Panel detect signal input terminal.
5	ENCODER1	I	Encoder Data input terminal.
6	ENCODER2		
7	CD STS	I	Status signal input terminal from CD mecha. µ-COM.
8	CD CMD	O	Command output terminal to CD mecha. µ-COM.
9	CD SCK	O	Serial Clock output terminal to CD mecha. µ-COM.
10	IN-INT	I	IN-INTERRUPT input terminal.
11	LCD DO	I	Serial Data signal input terminal from LCD Driver (LC75883E).
12	PDS MONI SI	I	Serial Data input terminal for RDS Monitor.
13	PDS MONI SO	O	Serial Data output terminal for RDS Monitor.
14	PDS MONI CLK	O	Serial Clock output terminal for RDS Monitor.
15	NC	—	No connect terminal.
16	LCD DI	O	Serial Data signal output terminal to LCD Driver (LC75883E).
17	LCD CLK	O	Serial Clock signal output terminal to LCD Driver (LC75883E).
18	LCD CE	O	Chip Enable signal output terminal to LCD Driver (LC75883E).
19	NC	—	No connect terminal.
20	$\overline{\text{LCD RST}}$	O	Reset signal output terminal to LCD Driver (LC75883E).
21	GND	—	GND connect terminal.
22	V_{DD}	—	V_{DD} connect terminal.
23	V-CONT	O	Servo / mecha. power control signal output terminal.
24	$\overline{\text{CD RST}}$	O	Reset signal output terminal to CD mecha. µ-COM.
25	$\overline{\text{CD STBY}}$	O	Stand-by control signal output terminal to CD mecha. µ-COM.
26	$\overline{\text{CD CS}}$	O	Communication control signal output terminal to CD mecha. µ-COM.
27	AM LOCAL / $\overline{\text{DX}}$	O	LOCAL/DX SEEK sensitivity switching terminal. (H : only valid at LOCAL SEEK ... usually receiving is L.)
28	AM IF	I	AM IF signal input terminal. (only selection at tuning AM)
29	FM IF	I	FM IF signal input terminal. (only selection at tuning FM)
30	V_{DD} PLL	—	V_{DD} connect terminal. (for PLL +B)
31	FM OSC	I	FM OSC signal input terminal.
32	AM OSC	I	AM OSC signal input terminal.
33	GND PLL	—	GND connect terminal. (for PLL GND)
34	EO 0	O	Charge pump output terminal of PLL Synthesizer.
35	EO 1		
36	IC (GND)	—	GND connect terminal.

No.	Symbol	I/O	Terminal Description
37	0-MUTE	I	0-bit Mute signal input terminal.
38	FM SD / $\overline{\text{ST IND}}$	I	Receiving FM : ST signal input terminal. (L : receiving ST station) Tuning FM : FM SD signal input terminal. (H : SD ON)
39	AM SD	I	AM SD signal input terminal.
40	FM LOCAL / $\overline{\text{DX}}$	O	LOCAL/DX SEEK sensitivity switching terminal. (L : only valid at DX SEEK...usually receiving is L.)
41	IF REQ	O	IF output control terminal. H : FM/AM SEEK, L : receiving
42	$\overline{\text{A-MUTE}}$	O	Audio Mute signal output terminal. L : Mute ON
43	E.VOL-DATA	O	Serial Data output terminal to E.VOL (TDA7404).
44	E.VOL-CLK	O	Serial Clock output terminal to E.VOL (TDA7404).
45	$\overline{\text{FM}}$ / AM	O	FM / AM power switching signal output terminal. L : FM
46	LW SEL	O	LPF Select Switching terminal for LW. H : LW
47	IF-MUTE	O	IF Mute output terminal.
48	PDS MONI CE	I/O	Chip Enable terminal for RDS Monitor.
49	RDS DAVN	I	RDS Data available input terminal.
50	RDS CLK	I/O	RDS Clock output terminal to RDS Decoder.
51	RDS DATA	O	RDS Data input/output terminal to RDS Decoder.
52	POWER IC ON	O	STBY CONT signal output terminal of Power IC.
53	NOSE POWER	O	Power control signal output terminal for LCD Driver and Remocon.
54	SD SW	O	Seek speed Switching terminal.
55	POWER CONT	O	Power control signal output terminal for Audio and Key lighting.
56	REMOTE ON	O	Remote ON signal output terminal for outer Amp.
57	NC(PULL-DOWN)	—	Pull-down connect terminal.
58	LIMT SW1	I	Active NOSE position detect signal input terminal.
59	NC(PULL-DOWN)	—	Pull-down connect terminal.
60	LIMT SW2	I	Active NOSE position detect signal input terminal.
61	MOTOR REV	O	Active NOSE open / close motor control signal output terminal.
62	MOTOR FOR		
63	PDS MONI INT	O	Communication terminal for RDS Monitor.
64	BBE1	O	BBE control output terminal.
65	BBE2		
66	BBE3		
67	REMOCON	I	Remocon Data input terminal.
68	BATT DET	I	BATT detect signal input terminal. Management compulsion Stand-by .
69	ACC DET	I	ACC (IGNITION) detect signal input terminal.
70	CHG BUS IN	I	Signal input terminal from CD Changer BUS I/F.
71	CHG BUS OUT	O	Signal output terminal to CD Changer BUS I/F.
72	DISC IN SW	I	DISC insert detect SW input terminal.
73	$\overline{\text{CD SRQ}}$	I	Communication request signal input terminal from CD mecha. µ-COM.
74	REG CPU	—	GND connect terminal (0.1µF). (for CPU+B regulator)

No.	Symbol	I/O	Terminal Description
75	GND	—	GND connect terminal.
76	X2	O	System Clock OSC circuit output terminal.
77	X1	I	System Clock OSC circuit input terminal.
78	REG OSC	—	GND connect terminal (0.1μF). (for OSC circuit regulator)
79	V_{DD}	—	V_{DD} connect terminal.
80	$\overline{\text{RESET}}$	I	System reset signal input terminal.

Electrical Parts List

Capacitor : μF=microfarads,pF=picofarads

Abbreviations

RES.= Resistor CAP.= Capacitor
C.F.= Carbon Film ELY.= Electrolytic
M.F.= Metal Film CER.= Ceramic
M.O.= Metal OxideFilm MYL.= Mylar
M.P.= Metal Plate TAN.= Tantalum
TR. = Transistor POLY.= Polystyrol
TRANS.= Transformer PP. = Polypropylene
CP. = Chip PLT.= Polyethylene
PF. = Polyester Film

Symbol No.	Part No.	Description
Main P.W.Board		
IC's		
IC001	51T15456Y01	TC74HC4066AFT-EL-SE5
IC003	51T65421W02	NJU7032M-TE3 -SE2
IC004	51T15132Y02	SAA6588T -SE9
IC005	51T96030F01	IC ,UPC1675G-T1
IC101	51T15510W01	IC ,MC34063AML -SPD
IC102	51T25045Y03	AN7705SP-TX -NE5
IC201	51T35261Y01	TDA7404 -SE9
IC202	51T15468Y01	NJM2150AM-TE1 -SE6
IC203	51T93336F01	IC,NJM4558M-TE3 -SE2
IC301	51T15021Y01	TDA7386 -ZS
IC601	51T35386Y04	OTP,178P018AGC
IC651	51T95563W01	S-80744HL-T1 -NE2
IC652	51T45214W03	S-80736AN-DO-T1 -NE2
IC801	51T25448Y01	BA6219BFP-Y-E2 -SE9
Transistors		
Q001	48T73888F12	TR ,CP.FMC2-99
Q002	48T62967F03	TR,DTC124EKA-T146-CP
Q003	48T62966F03	TR,DTA124EKA-T146-CP
Q004	48T62967F03	TR,DTC124EKA-T146-CP
Q007	48T62967F03	TR,DTC124EKA-T146-CP
Q009	48T62967F03	TR,DTC124EKA-T146-CP
Q010	48T94875F04	DTB,CP-123YK-96
Q011	48T15289W04	TR ,2SD2008R-RD
Q013	48T73888F13	TR ,CP FMC3-99
Q015	48T62967F03	TR,DTC124EKA-T146-CP
Q016	48T62967F03	TR,DTC124EKA-T146-CP
Q101	48T73888F13	TR ,CP FMC3-99
Q102	48T73888F12	TR ,CP.FMC2-99
Q103	48T15511W02	CP.2SB1261-TE2 -E5
Q240	48T62967F03	TR,DTC124EKA-T146-CP
Q261	48T62967F33	TR,DTC343TK-T146 -CP
Q262	48T62967F33	TR,DTC343TK-T146 -CP
Q263	48T62967F33	TR,DTC343TK-T146 -CP
Q264	48T62967F33	TR,DTC343TK-T146 -CP
Q301	48T62967F03	TR,DTC124EKA-T146-CP
Q601	48T62967F03	TR,DTC124EKA-T146-CP
Q602	48T94875F04	DTB,CP-123YK-96
Q603	48T52438F04	TR ,2SD601A-S /TX-CP
Q604	48T52438F04	TR ,2SD601A-S /TX-CP
Q651	48T92368F04	TR,2SD1760 R -E5
Q652	48T73888F12	TR ,CP.FMC2-99
Q661	48T62966F03	TR,DTA124EKA-T146-CP
Q662	48T62967F03	TR,DTC124EKA-T146-CP
Q663	48T62967F03	TR,DTC124EKA-T146-CP
Q664	48T62966F01	TR,DTA143EKA-T146-CP
Q671	48T62967F02	TR,DTC114EKA-T146-CP
Q672	48T62967F02	TR,DTC114EKA-T146-CP
Q673	48T63420F01	TR,2SA1037AK-146 -CP
Q674	48T62967F02	TR,DTC114EKA-T146-CP
Q801	48T73888F12	TR ,CP.FMC2-99
Q802	48T93828F04	TR,2SD1994A-S-TA -RD
Q803	48T93828F04	TR,2SD1994A-S-TA -RD
Q822	48T93828F04	TR,2SD1994A-S-TA -RD
Q823	48T52438F04	TR ,2SD601A-S /TX-CP
Q824	48T69176F02	TR ,2SC3421-Y
Q843	48T84366F04	TR,2SB1243-QR-TV2-RD
Q844	48T62967F01	TR,DTC143EKA-T146-CP
Q845	48T63420F01	TR,2SA1037AK-146 -CP
Q846	48T62967F03	TR,DTC124EKA-T146-CP
Q847	48T84366F04	TR,2SB1243-QR-TV2-RD
Q848	48T62967F05	TR,DTC143XKA-T146-CP
Q849	48T69176F02	TR ,2SC3421-Y
Q862	48T73888F12	TR ,CP.FMC2-99
Q863	48T62967F03	TR,DTC124EKA-T146-CP
Diodes		
D001	48T63462F01	DIO,CP.DAN202K -96
D102	48T55247W02	DIO,11EQS04 -R5
D103	48T95572W01	DIO,SHT MA736-TX -E1
D231	48T68828F11	DIO,1SS133 -RH
D653	48T68828F11	DIO,1SS133 -RH
D654	48T68828F11	DIO,1SS133 -RH
D661	48T68828F11	DIO,1SS133 -RH
D662	48T63462F01	DIO,CP.DAN202K -96
D671	48T63462F01	DIO,CP.DAN202K -96
D802	48T81063F01	DIO,CP.MA159 / TX-CP

CDM-7861R

Symbol No.	Part No.	Description
D821	48T35355Y01	DIO,1SS244 -A5
D822	48T35355Y01	DIO,1SS244 -A5
D831	48T84052F11	DIO,SI 11ES2-TB5 -R5
D832	48T85357W01	DIO,1PS226 -CP
SD101	48T85269W02	DIO,SHT SB040 -H5
SD801	48T68580F03	DIO,SI DSA3A4-F5
ZD001	48T25766W22	DIO,ZEN.HZS 9B2L -R5
ZD003	48T25766W36	DIO,ZEN.HZS12A1L -R5
ZD651	48T25766W04	DIO,ZEN.HZS 6B1L -R5
ZD652	48T25766W14	DIO,ZEN.HZS 7B2L -R5
ZD801	48T25766W39	DIO,ZEN.HZS12B1L -R5
ZD802	48T25801W08	DIO,ZEN.HZS 4BLL -R5
ZD821	48T25766W25	DIO,ZEN.HZS 9C2L -R5
ZD822	48T25766W34	DIO,ZEN HZS11C2L -R5
ZD841	48T25766W24	DIO,ZEN.HZS 9C1L -R5
Coils		
L001	24T16403W23	COI,IND.4R7-M -CP
L002	24T16403W29	COI,IND.15R-M -CP
L101	24T85339W17	IND,CDRH125 221M -EA
L651	24T16403W23	COI,IND.4R7-M -CP
L801	25T25663Y01	CHOKE,LAT1608-105-DB
L820	24T70381F16	IND,LAL02 3R9K -A5
VT001	24T35286Y01	IND,MG56 523J -DB
Z201	24T35072W03	FBI,BL02RN1-R62T4-R5
Filters		
CF001	91T75257W02	LPF,LPF11830KH-3C-DB
Z001	91T65112W06	EMI,BK2125HM102 -CP
Z002	91T65112W06	EMI,BK2125HM102 -CP
Z004	91T65112W06	EMI,BK2125HM102 -CP
Z005	91T65112W06	EMI,BK2125HM102 -CP
Z006	91T65112W06	EMI,BK2125HM102 -CP
Z007	91T65112W06	EMI,BK2125HM102 -CP
Z601	91T65112W06	EMI,BK2125HM102 -CP
Z602	91T65112W06	EMI,BK2125HM102 -CP
LED's		
LD601	48T65477W05	LED,SML-010DTT87 -CP(ORG)
LD602	48T65477W05	LED,SML-010DTT87 -CP(ORG)

Symbol No.	Part No.	Description
Crystals		
XL001	91T85169W18	XTL,HC-49 4.332M -R5
XL601	91T85169W23	XTL,HC-49 4.500M -R5
Surge Absorber		
SA001	48T81909F01	PTT,DSP-201M -A1
Transformer		
T821	25T35480Y01	TRANS,CEE-78 -EA
Capacitors		
C001	08S65128F69	CAP,CER.103K-B1H -CP
C003	08S65128F57	CAP,CER.102K-B1H -CP
C004	08S65128F69	CAP,CER.103K-B1H -CP
C005	08S65128F70	CAP,CER.123K-B1H -CP
C006	08S65128F57	CAP,CER.102K-B1H -CP
C008	08S65128F57	CAP,CER.102K-B1H -CP
C009	08S65128F78	CAP,CER.223K-B1H -CP
C010	08S65128F78	CAP,CER.223K-B1H -CP
C012	08S82122F37	CAP,CER.101J-CH1H-CP
C014	08S65128F78	CAP,CER.223K-B1H -CP
C015	08S65128F69	CAP,CER.103K-B1H -CP
C016	08S65128F78	CAP,CER.223K-B1H -CP
C018	08T55390W13	CAP,PF 472J-1H -R5
C019	08T55390W29	CAP,TF 104J-1H -R5
C021	08S65128F61	CAP,CER.222K-B1H -CP
C022	08S82122F49	CAP,CER.331J-CH1H-CP
C023	08S35374W01	CAP,CER 104K-B1E-CP
C024	08S65128F78	CAP,CER.223K-B1H -CP
C025	08S82122F43	CAP,CER.181J-CH1H-CP
C026	08S35374W01	CAP,CER 104K-B1E-CP
C027	08S82122F21	CAP,CER.22RJ-CH1H-CP
C028	08S82122F17	CAP,CER.15RJ-CH1H-CP
C029	08S82122F37	CAP,CER.101J-CH1H-CP
C030	08S82122F37	CAP,CER.101J-CH1H-CP
C031	08S35374W01	CAP,CER 104K-B1E-CP
C032	08S82122F55	CAP,CER.561J-CH1H-CP
C035	08S65128F78	CAP,CER.223K-B1H -CP
C036	08S82122F37	CAP,CER.101J-CH1H-CP
C037	08S65128F57	CAP,CER.102K-B1H -CP
C038	08S82122F37	CAP,CER.101J-CH1H-CP
C040	08S65128F78	CAP,CER.223K-B1H -CP

Symbol No.	Part No.	Description
C042	08T55390W06	CAP,PF 122J-1H -R5
C044	08S82122F37	CAP,CER.101J-CH1H-CP
C045	08S82122F37	CAP,CER.101J-CH1H-CP
C047	08S65128F69	CAP,CER.103K-B1H -CP
C049	08S65128F69	CAP,CER.103K-B1H -CP
C050	08S35374W01	CAP,CER 104K-B1E-CP
C101	08S60102F48	CAP,CER 105K-B1E -CP
C102	08S82122F39	CAP,CER.121J-CH1H-CP
C104	08S35374W01	CAP,CER 104K-B1E-CP
C106	08S65128F59	CAP,CER.152K-B1H -CP
C107	08S65128F78	CAP,CER.223K-B1H -CP
C108	08S65128F63	CAP,CER.332K-B1H -CP
C109	08S65128F63	CAP,CER.332K-B1H -CP
C110	08S65128F78	CAP,CER.223K-B1H -CP
C202	08S65128F57	CAP,CER.102K-B1H -CP
C203	08S65128F57	CAP,CER.102K-B1H -CP
C204	08S65128F57	CAP,CER.102K-B1H -CP
C205	08S65128F57	CAP,CER.102K-B1H -CP
C221	08S65128F63	CAP,CER.332K-B1H -CP
C222	08T55390W23	CAP,TF 333J-1H -R5
C223	08S65128F63	CAP,CER.332K-B1H -CP
C224	08T55390W23	CAP,TF 333J-1H -R5
C232	08S82122F26	CAP,CER.36RJ-CH1H-CP
C301	08T25628Y03	CAP,TF 224M-1C -CP
C302	08T25628Y03	CAP,TF 224M-1C -CP
C303	08T25628Y03	CAP,TF 224M-1C -CP
C304	08T25628Y03	CAP,TF 224M-1C -CP
C602	08S65128F78	CAP,CER.223K-B1H -CP
C603	08S65128F78	CAP,CER.223K-B1H -CP
C607	08S35374W01	CAP,CER 104K-B1E-CP
C608	08S82122F17	CAP,CER.15RJ-CH1H-CP
C609	08S82122F15	CAP,CER.12RJ-CH1H-CP
C610	08S35374W01	CAP,CER 104K-B1E-CP
C611	08S65128F78	CAP,CER.223K-B1H -CP
C612	08S65128F69	CAP,CER.103K-B1H -CP
C613	08S82122F37	CAP,CER.101J-CH1H-CP
C614	08S82122F37	CAP,CER.101J-CH1H-CP
C617	08S82122F37	CAP,CER.101J-CH1H-CP
C620	08S82122F37	CAP,CER.101J-CH1H-CP
C623	08S65128F57	CAP,CER.102K-B1H -CP
C630	08S65128F57	CAP,CER.102K-B1H -CP
C631	08S82122F43	CAP,CER.181J-CH1H-CP
C632	08S82122F43	CAP,CER.181J-CH1H-CP
C661	08S82122F49	CAP,CER.331J-CH1H-CP
C662	08S65128F57	CAP,CER.102K-B1H -CP
C671	08S82122F37	CAP,CER.101J-CH1H-CP
C672	08S35374W01	CAP,CER 104K-B1E-CP
C673	08S65128F61	CAP,CER.222K-B1H -CP
C674	08S65128F69	CAP,CER.103K-B1H -CP

Symbol No.	Part No.	Description
C801	08S65128F90	CAP,CER 473K-B1H -CP
C802	08S65128F78	CAP,CER.223K-B1H -CP
C803	08S65128F79	CAP,CER.273K-B1H -CP
C806	08S65128F79	CAP,CER.273K-B1H -CP
C807	08S65128F78	CAP,CER.223K-B1H -CP
C808	08S65128F78	CAP,CER.223K-B1H -CP
C810	08T95466W07	CAP,CER 103K-B2J -CP
C811	08T95466W07	CAP,CER 103K-B2J -CP
C813	08T95466W07	CAP,CER 103K-B2J -CP
C822	08S65128F66	CAP,CER.562K-B1H -CP
C823	08T25628Y04	CAP,TF 104M-1C -CP
C831	08T55401W37	CAP,TF 104J-1H -E2
C832	08S65128F71	CAP,CER.153K-B1H -CP
C833	08S65128F71	CAP,CER.153K-B1H -CP
E001	23S75373W08	CAP,ELY R10-1H -R2
E003	23S75373W13	CAP,ELY 1R0-1H -R2
E004	23S75373W06	CAP,ELY 101-1C -R2
E005	23S82372F19	CAP,ELY.2R2-1H-BP-R2
E006	23S75372W02	CAP,ELY 101-1A -R2
E007	23S75372W16	CAP,ELY 2R2-1H -R2
E008	23S75372W03	CAP,ELY 221-1A -H2
E012	23S75373W03	CAP,ELY 22R-1C -R2
E013	23S75373W02	CAP,ELY 10R-1C -R2
E014	23S75373W03	CAP,ELY 22R-1C -R2
E101	23S75372W08	CAP,ELY 101-1C -H2
E102	23T55378W03	CAP,KMG 471-1A -R2
E103	23S75372W02	CAP,ELY 101-1A -R2
E104	23S75372W05	CAP,ELY 22R-1C -R2
E201	23S75373W13	CAP,ELY 1R0-1H -R2
E202	23S75373W13	CAP,ELY 1R0-1H -R2
E203	23S75373W08	CAP,ELY R10-1H -R2
E204	23S75373W08	CAP,ELY R10-1H -R2
E207	23S75373W03	CAP,ELY 22R-1C -R2
E208	23S75373W05	CAP,ELY 47R-1C -R2
E209	23S75373W12	CAP,ELY R68-1H -R2
E210	23S75373W12	CAP,ELY R68-1H -R2
E221	23S75373W02	CAP,ELY 10R-1C -R2
E222	23S75373W02	CAP,ELY 10R-1C -R2
E223	23S75373W02	CAP,ELY 10R-1C -R2
E224	23S75373W02	CAP,ELY 10R-1C -R2
E225	23S75373W03	CAP,ELY 22R-1C -R2
E226	23S75372W09	CAP,ELY 4R7-1V -R2
E227	23S75372W09	CAP,ELY 4R7-1V -R2
E231	23S75373W02	CAP,ELY 10R-1C -R2
E232	23S75372W16	CAP,ELY 2R2-1H -R2
E233	23S75373W03	CAP,ELY 22R-1C -R2
E241	23S75373W14	CAP,ELY 2R2-1H -R2
E242	23S75373W14	CAP,ELY 2R2-1H -R2
E243	23S75373W14	CAP,ELY 2R2-1H -R2

Symbol No.	Part No.	Description
E261	23S75373W14	CAP,ELY 2R2-1H -R2
E262	23S75373W14	CAP,ELY 2R2-1H -R2
E263	23S75373W14	CAP,ELY 2R2-1H -R2
E264	23S75373W14	CAP,ELY 2R2-1H -R2
E301	23S65134W65	CAP,ELY 1R0-1H(3)-E2
E302	23T95115W02	CAP,AD 1R0-1H -R2
E303	23S65134W34	CAP,ELY 47R-1C(6)-E6
E304	23S75373W02	CAP,ELY 10R-1C -R2
E601	23S75372W05	CAP,ELY 22R-1C -R2
E602	23S75372W03	CAP,ELY 221-1A -H2
E603	23S75372W05	CAP,ELY 22R-1C -R2
E604	23T15765Y78	CAP,TAN 22R-1C-E -E1
E651	23S75372W08	CAP,ELY 101-1C -H2
E652	23S75372W15	CAP,ELY 1R0-1H -R2
E653	23S75372W02	CAP,ELY 101-1A -R2
E654	23S75373W08	CAP,ELY R10-1H -R2
E656	23S75372W04	CAP,ELY 10R-1C -R2
E801	23T75346W03	CAP,X-PRO 332-1C +
E802	23S75372W05	CAP,ELY 22R-1C -R2
E803	23S75373W05	CAP,ELY 47R-1C -R2
E822	23S75372W08	CAP,ELY 101-1C -H2
E823	23S65134W55	CAP,ELY 22R-1V(6)-E6
E825	23S75373W06	CAP,ELY 101-1C -R2
E826	23S55311W36	CAP,TAN 47R-1C-D -E2
E827	23S75372W08	CAP,ELY 101-1C -H2
E841	23S75373W02	CAP,ELY 10R-1C -R2
E842	23S75373W06	CAP,ELY 101-1C -R2
E843	23S75373W04	CAP,ELY 33R-1C -R2
E844	23S75372W02	CAP,ELY 101-1A -R2
Resistors		
J012	06T55066F39	RES,FC .0R0J-1/4 -A5
R001	06T75431W59	RES,RK 102J 1/10 -CP
R002	06T75431W81	RES,RK 822J 1/10 -CP
R003	06T75433W82	RES,RK 243J 1/4 -CP
R004	06T75431W99	RES,RK 473J 1/10 -CP
R005	06T75431W96	RES,RK 363J 1/10 -CP
R007	06T75431W87	RES,RK 153J 1/10 -CP
R008	06T75431W75	RES,RK 472J 1/10 -CP
R009	06T75431W83	RES,RK 103J 1/10 -CP
R010	06T75431W97	RES,RK 393J 1/10 -CP
R011	06T75431W70	RES,RK 302J 1/10 -CP
R012	06T75432W50	RES,RK JUMPER1/10-CP
R013	06T75432W50	RES,RK JUMPER1/10-CP
R016	06T75431W83	RES,RK 103J 1/10 -CP
R020	06T75431W91	RES,RK 223J 1/10 -CP
R021	06T75431W91	RES,RK 223J 1/10 -CP
R023	06T25279Y04	RES,RK JUMPER1/16-CP
R024	06T75432W50	RES,RK JUMPER1/10-CP
R025	06T75433W47	RES,RK 821J 1/4 -CP
R026	06T75431W59	RES,RK 102J 1/10 -CP
R027	06T75431W59	RES,RK 102J 1/10 -CP
R028	06T75431W67	RES,RK 222J 1/10 -CP
R029	06T75431W67	RES,RK 222J 1/10 -CP
R030	06T75433W25	RES,RK 101J 1/4 -CP
R031	06T75431W91	RES,RK 223J 1/10 -CP
R032	06T25277Y57	RES,RK 102J 1/16 -CP
R033	06T25279Y04	RES,RK JUMPER1/16-CP
R034	06T75431W91	RES,RK 223J 1/10 -CP
R036	06T75431W83	RES,RK 103J 1/10 -CP
R037	06T75431W11	RES,RK 10RJ 1/10 -CP
R038	06T75432W50	RES,RK JUMPER1/10-CP
R039	06T75432W24	RES,RK 474J 1/10 -CP
R041	06T75431W67	RES,RK 222J 1/10 -CP
R044	06T75431W59	RES,RK 102J 1/10 -CP
R045	06T75431W59	RES,RK 102J 1/10 -CP
R046	06S70072F01	RES,CP .4R7-J-1/4-CP
R047	06T75431W77	RES,RK 562J 1/10 -CP
R048	06T75431W77	RES,RK 562J 1/10 -CP
R049	06T75433W37	RES,RK 331J 1/4 -CP
R051	06T75431W43	RES,RK 221J 1/10 -CP
R053	06T75431W43	RES,RK 221J 1/10 -CP
R054	06T75433W47	RES,RK 821J 1/4 -CP
R057	06T75431W91	RES,RK 223J 1/10 -CP
R058	06T75431W91	RES,RK 223J 1/10 -CP
R059	06T75431W75	RES,RK 472J 1/10 -CP
R101	06T75433W49	RES,RK 102J 1/4 -CP
R102	06T75433W49	RES,RK 102J 1/4 -CP
R105	06T75433W25	RES,RK 101J 1/4 -CP
R106	06T75433W43	RES,RK 561J 1/4 -CP
R107	06T75433W43	RES,RK 561J 1/4 -CP
R108	06S35084Y41	RES,RK 223F 1/8 -CP
R109	06S35084Y33	RES,RK 472F 1/8 -CP
R110	06T75432W22	RES,RK 394J 1/10 -CP
R203	06T75431W43	RES,RK 221J 1/10 -CP
R204	06T75431W43	RES,RK 221J 1/10 -CP
R221	06T75431W90	RES,RK 203J 1/10 -CP
R222	06T75431W90	RES,RK 203J 1/10 -CP
R225	06T75431W83	RES,RK 103J 1/10 -CP
R226	06T75431W90	RES,RK 203J 1/10 -CP
R227	06T75431W90	RES,RK 203J 1/10 -CP
R228	06T75431W83	RES,RK 103J 1/10 -CP
R229	06T75431W83	RES,RK 103J 1/10 -CP
R231	06T75431W99	RES,RK 473J 1/10 -CP
R232	06T75432W50	RES,RK JUMPER1/10-CP
R234	06T75431W91	RES,RK 223J 1/10 -CP

Symbol No.	Part No.	Description
R235	06T75431W82	RES,RK 912J 1/10 -CP
R236	06T75431W60	RES,RK 112J 1/10 -CP
R237	06T75431W60	RES,RK 112J 1/10 -CP
R238	06T75431W89	RES,RK 183J 1/10 -CP
R242	06T75432W50	RES,RK JUMPER1/10-CP
R243	06T75432W50	RES,RK JUMPER1/10-CP
R261	06T75431W42	RES,RK 201J 1/10 -CP
R262	06T75431W42	RES,RK 201J 1/10 -CP
R263	06T75431W98	RES,RK 433J 1/10 -CP
R264	06T75431W98	RES,RK 433J 1/10 -CP
R265	06T75431W35	RES,RK 101J 1/10 -CP
R266	06T75431W35	RES,RK 101J 1/10 -CP
R267	06T75431W42	RES,RK 201J 1/10 -CP
R268	06T75431W42	RES,RK 201J 1/10 -CP
R269	06T75431W98	RES,RK 433J 1/10 -CP
R270	06T75431W98	RES,RK 433J 1/10 -CP
R271	06T75431W35	RES,RK 101J 1/10 -CP
R272	06T75431W35	RES,RK 101J 1/10 -CP
R301	06T75433W33	RES,RK 221J 1/4 -CP
R302	06T75433W33	RES,RK 221J 1/4 -CP
R303	06T75433W33	RES,RK 221J 1/4 -CP
R304	06T75433W33	RES,RK 221J 1/4 -CP
R305	06T75433W73	RES,RK 103J 1/4 -CP
R306	06T75431W84	RES,RK 113J 1/10 -CP
R307	06T75431W87	RES,RK 153J 1/10 -CP
R308	06T75431W43	RES,RK 221J 1/10 -CP
R602	06T75432W08	RES,RK 104J 1/10 -CP
R604	06T75431W91	RES,RK 223J 1/10 -CP
R605	06T75431W91	RES,RK 223J 1/10 -CP
R606	06T75431W91	RES,RK 223J 1/10 -CP
R607	06T75431W83	RES,RK 103J 1/10 -CP
R608	06T75431W83	RES,RK 103J 1/10 -CP
R611	06T75431W59	RES,RK 102J 1/10 -CP
R612	06T75431W59	RES,RK 102J 1/10 -CP
R613	06T75431W59	RES,RK 102J 1/10 -CP
R614	06T75431W59	RES,RK 102J 1/10 -CP
R615	06T75431W59	RES,RK 102J 1/10 -CP
R616	06T75431W59	RES,RK 102J 1/10 -CP
R617	06T75431W59	RES,RK 102J 1/10 -CP
R618	06T75431W91	RES,RK 223J 1/10 -CP
R619	06T75431W91	RES,RK 223J 1/10 -CP
R622	06T75431W69	RES,RK 272J 1/10 -CP
R623	06T75432W08	RES,RK 104J 1/10 -CP
R624	06T75431W99	RES,RK 473J 1/10 -CP
R625	06T75432W50	RES,RK JUMPER1/10-CP
R627	06T75433W37	RES,RK 331J 1/4 -CP
R629	06T75431W99	RES,RK 473J 1/10 -CP
R630	06T75432W16	RES,RK 224J 1/10 -CP
R631	06T75431W59	RES,RK 102J 1/10 -CP

Symbol No.	Part No.	Description
R632	06T75431W59	RES,RK 102J 1/10 -CP
R634	06T75431W45	RES,RK 271J 1/10 -CP
R635	06T75431W99	RES,RK 473J 1/10 -CP
R636	06T75431W99	RES,RK 473J 1/10 -CP
R638	06T75431W99	RES,RK 473J 1/10 -CP
R639	06T75431W91	RES,RK 223J 1/10 -CP
R640	06T75432W24	RES,RK 474J 1/10 -CP
R641	06T75431W91	RES,RK 223J 1/10 -CP
R642	06T75431W59	RES,RK 102J 1/10 -CP
R643	06T75431W59	RES,RK 102J 1/10 -CP
R644	06T75431W99	RES,RK 473J 1/10 -CP
R645	06T75431W45	RES,RK 271J 1/10 -CP
R646	06T75431W75	RES,RK 472J 1/10 -CP
R647	06T75431W75	RES,RK 472J 1/10 -CP
R648	06T75432W50	RES,RK JUMPER1/10-CP
R651	06T75433W64	RES,RK 432J 1/4 -CP
R652	06T75432W28	RES,RK 684J 1/10 -CP
R653	06T75433W01	RES,RK 10RJ 1/4 -CP
R654	06T75433W65	RES,RK 472J 1/4 -CP
R655	06T75433W65	RES,RK 472J 1/4 -CP
R656	06T75431W91	RES,RK 223J 1/10 -CP
R657	06T75431W75	RES,RK 472J 1/10 -CP
R659	06T75431W75	RES,RK 472J 1/10 -CP
R661	06T75433W81	RES,RK 223J 1/4 -CP
R662	06T75433W33	RES,RK 221J 1/4 -CP
R663	06T75431W91	RES,RK 223J 1/10 -CP
R664	06T75431W99	RES,RK 473J 1/10 -CP
R666	06T75432W50	RES,RK JUMPER1/10-CP
R667	06T75432W50	RES,RK JUMPER1/10-CP
R668	06T75432W50	RES,RK JUMPER1/10-CP
R671	06T75431W59	RES,RK 102J 1/10 -CP
R672	06T75431W83	RES,RK 103J 1/10 -CP
R673	06T75431W91	RES,RK 223J 1/10 -CP
R674	06T75431W91	RES,RK 223J 1/10 -CP
R675	06T75431W67	RES,RK 222J 1/10 -CP
R676	06T75431W71	RES,RK 332J 1/10 -CP
R677	06T75431W35	RES,RK 101J 1/10 -CP
R801	06T75433W49	RES,RK 102J 1/4 -CP
R802	06T75433W39	RES,RK 391J 1/4 -CP
R803	06T75434W22	RES,RK 2R2J 1/4 -CP
R804	06T75434W22	RES,RK 2R2J 1/4 -CP
R805	06T75433W13	RES,RK 33RJ 1/4 -CP
R806	06T75433W13	RES,RK 33RJ 1/4 -CP
R807	06T75433W13	RES,RK 33RJ 1/4 -CP
R808	06T75433W13	RES,RK 33RJ 1/4 -CP
R809	06T75433W13	RES,RK 33RJ 1/4 -CP
R810	06T75433W13	RES,RK 33RJ 1/4 -CP
R811	06T75432W50	RES,RK JUMPER1/10-CP
R812	06T75433W73	RES,RK 103J 1/4 -CP

CDM-7861R

Symbol No.	Part No.	Description
R822	06T75433W39	RES,RK 391J 1/4 -CP
R823	06T75434W22	RES,RK 2R2J 1/4 -CP
R824	06T75434W14	RES,RK 474J 1/4 -CP
R825	06T75431W79	RES,RK 682J 1/10 -CP
R826	06T75431W11	RES,RK 10RJ 1/10 -CP
R827	06T75434W19	RES,RK 754J 1/4 -CP
R828	06T75433W33	RES,RK 221J 1/4 -CP
R829	06T75433W88	RES,RK 433J 1/4 -CP
R831	06T75433W73	RES,RK 103J 1/4 -CP
R835	06T75431W92	RES,RK 243J 1/10 -CP
R836	06T75433W55	RES,RK 182J 1/4 -CP
R837	06T75433W55	RES,RK 182J 1/4 -CP
R838	06T75434W25	RES,RK 8R2J 1/4 -CP
R839	06T75434W25	RES,RK 8R2J 1/4 -CP
R840	06T75434W25	RES,RK 8R2J 1/4 -CP
R841	06T75434W25	RES,RK 8R2J 1/4 -CP
R844	06T75433W82	RES,RK 243J 1/4 -CP
R845	06T75433W57	RES,RK 222J 1/4 -CP
R846	06T75431W83	RES,RK 103J 1/10 -CP
R847	06T75433W82	RES,RK 243J 1/4 -CP
R848	06T75433W55	RES,RK 182J 1/4 -CP
R849	06T75433W55	RES,RK 182J 1/4 -CP
R850	06T75433W54	RES,RK 162J 1/4 -CP
R851	06T75433W54	RES,RK 162J 1/4 -CP
R852	06T75433W45	RES,RK 681J 1/4 -CP
R853	06T75431W83	RES,RK 103J 1/10 -CP
R862	06T75432W50	RES,RK JUMPER1/10-CP
R864	06T75431W83	RES,RK 103J 1/10 -CP
R865	06T75432W30	RES,RK 824J 1/10 -CP

Connectors

CB201	09T25436Y06	WTB,53253-0610 -DB
CB301 CB302	01T35356Y01	ASSY,CONN 0203-01A
CB303 CB304	01T35356Y02	ASSY,CONN 0203-02A
CB601	09T45434W15	FFC,52271-1590 -ED
CB802	09T25436Y02	WTB,53253-0210 -DB
CH101	09T25684Y22	FFC,SLW22R-1C7 -DB

Front P.W.Board

IC's

IC401	51T85152W02	LC75883E -QT

Symbol No.	Part No.	Description
IC402	51T25419Y01	RS-181 -NE6

Transistors

Q405	48T62967F02	TR,DTC114EKA-T146-CP

Diodes

D411	48T81063F01	DIO,CP.MA159 / TX-CP
D412	48T81063F01	DIO,CP.MA159 / TX-CP
D413	48T63462F01	DIO,CP.DAN202K -96
ZD401	48T62934F26	DIO,ZEN.RD6.2MB3 -CP

LED's

LD401	48T25534Y02	LED,RED BR1111C -CP
LD402	48T25534Y01	LED,GRN BG1111C -CP
LD403	48T25534Y01	LED,GRN BG1111C -CP
LD404	48T25534Y01	LED,GRN BG1111C -CP
LD405	48T65477W03	LED,SML-010PTT87 -CP(GRN)
LD406	48T25534Y01	LED,GRN BG1111C -CP
LD407	48T25534Y01	LED,GRN BG1111C -CP
LD408	48T65477W03	LED,SML-010PTT87 -CP(GRN)
LD409	48T65477W03	LED,SML-010PTT87 -CP(GRN)
LD410	48T65477W03	LED,SML-010PTT87 -CP(GRN)
LD411	48T65477W03	LED,SML-010PTT87 -CP(GRN)
LD412	48T65477W03	LED,SML-010PTT87 -CP(GRN)
LD413	48T65477W03	LED,SML-010PTT87 -CP(GRN)
LD414	48T25534Y01	LED,GRN BG1111C -CP
LD415	48T25534Y01	LED,GRN BG1111C -CP
LD416	48T25534Y01	LED,GRN BG1111C -CP
LD417	48T25534Y01	LED,GRN BG1111C -CP
LD418	48T25534Y01	LED,GRN BG1111C -CP
LD419	48T25534Y01	LED,GRN BG1111C -CP
LD420	48T25534Y01	LED,GRN BG1111C -CP
LD421	48T25534Y01	LED,GRN BG1111C -CP
LD422	48T25583Y01	LED,BLU KB1111CE -CP
LD423	48T25534Y01	LED,GRN BG1111C -CP
LD424	48T25534Y01	LED,GRN BG1111C -CP
LD425	48T25534Y01	LED,GRN BG1111C -CP
LD426	48T25534Y01	LED,GRN BG1111C -CP
LD427	48T25534Y01	LED,GRN BG1111C -CP
LD428	48T25534Y01	LED,GRN BG1111C -CP
LD429	48T25534Y01	LED,GRN BG1111C -CP
LD430	48T25534Y01	LED,GRN BG1111C -CP

Symbol No.	Part No.	Description
Switches		
SW400	40T55656W06	SW,TACT SKQMAJ001-E2(RESET)
SW401	40T55656W06	SW,TACT SKQMAJ001-E2(T.INFO)
SW402	40T55656W06	SW,TACT SKQMAJ001-E2(FWD/UP)
SW403	40T55656W06	SW,TACT SKQMAJ001-E2 (PLAY/PAUSE/TUNE/A.ME)
SW404	40T55656W06	SW,TACT SKQMAJ001-E2(DN/BWD)
SW406	40T55656W06	SW,TACT SKQMAJ001-E2 (PWR/SOURCE)
SW407	40T55656W06	SW,TACT SKQMAJ001-E2(BAND)
SW408	40T55656W06	SW,TACT SKQMAJ001-E2(BBE)
SW409	40T55656W06	SW,TACT SKQMAJ001-E2(DISP/INTLZ)
SW410	40T55656W06	SW,TACT SKQMAJ001-E2(TITLE)
SW411	40T55656W06	SW,TACT SKQMAJ001-E2(F/B.C.)
SW412	40T55656W06	SW,TACT SKQMAJ001-E2(1/AF)
SW413	40T55656W06	SW,TACT SKQMAJ001-E2(2/NEWS)
SW414	40T55656W06	SW,TACT SKQMAJ001-E2(3/PTY)
SW415	40T55656W06	SW,TACT SKQMAJ001-E2(M.I.X.)
SW416	40T55656W06	SW,TACT SKQMAJ001-E2(5/RPT)
SW417	40T55656W06	SW,TACT SKQMAJ001-E2(6/SCAN)
SW418	40T55656W06	SW,TACT SKQMAJ001-E2(EJECT)
SW419	40T55656W06	SW,TACT SKQMAJ001-E2(ANGLE UP)
SW420	40T55656W06	SW,TACT SKQMAJ001-E2 (ANGLE DOWN)
Capacitors		
C404	08S82122F57	CAP,CER.681J-CH1H-CP
C405	08T15399W03	CAP,CER.473K-B1H -CP
C406	08T15399W03	CAP,CER.473K-B1H -CP
C407	08T15399W03	CAP,CER.473K-B1H -CP
C408	08S35374W01	CAP,CER 104K-B1E-CP
E402	23T15765Y17	CAP,TAN 4R7-1C-S -CP
Resistors		
R404	06T75433W32	RES,RK 201J 1/4 -CP
R405	06T75433W32	RES,RK 201J 1/4 -CP
R406	06T75433W29	RES,RK 151J 1/4 -CP
R407	06T75433W45	RES,RK 681J 1/4 -CP
R408	06T75433W29	RES,RK 151J 1/4 -CP
R409	06T75433W35	RES,RK 271J 1/4 -CP
R410	06T75433W32	RES,RK 201J 1/4 -CP
R411	06T75433W51	RES,RK 122J 1/4 -CP
R412	06T75433W35	RES,RK 271J 1/4 -CP
R413	06T75433W39	RES,RK 391J 1/4 -CP
R414	06T75431W59	RES,RK 102J 1/10 -CP

Symbol No.	Part No.	Description
R415	06T75431W59	RES,RK 102J 1/10 -CP
R416	06T75431W59	RES,RK 102J 1/10 -CP
R417	06T75431W59	RES,RK 102J 1/10 -CP
R418	06T75431W59	RES,RK 102J 1/10 -CP
R419	06T75431W75	RES,RK 472J 1/10 -CP
R420	06T75431W59	RES,RK 102J 1/10 -CP
R421	06T75431W59	RES,RK 102J 1/10 -CP
R422	06T75431W59	RES,RK 102J 1/10 -CP
R423	06T75431W59	RES,RK 102J 1/10 -CP
R424	06T75431W98	RES,RK 433J 1/10 -CP
R425	06T75431W59	RES,RK 102J 1/10 -CP
R426	06T75431W59	RES,RK 102J 1/10 -CP
R427	06T75431W59	RES,RK 102J 1/10 -CP
R428	06T75431W59	RES,RK 102J 1/10 -CP
R429	06T75431W59	RES,RK 102J 1/10 -CP
R430	06T75431W59	RES,RK 102J 1/10 -CP
R440	06T75431W59	RES,RK 102J 1/10 -CP
R441	06T75431W83	RES,RK 103J 1/10 -CP
R442	06T75431W83	RES,RK 103J 1/10 -CP
R443	06T75431W59	RES,RK 102J 1/10 -CP
R444	06T75431W83	RES,RK 103J 1/10 -CP
R445	06T75431W59	RES,RK 102J 1/10 -CP
R446	06T75433W25	RES,RK 101J 1/4 -CP
R447	06T75431W91	RES,RK 223J 1/10 -CP
R456	06T75433W75	RES,RK 123J 1/4 -CP
R457	06T75433W56	RES,RK 202J 1/4 -CP
R459	06T75433W56	RES,RK 202J 1/4 -CP
R462	06T75432W08	RES,RK 104J 1/10 -CP
Miscellaneous		
ANT001	01T15513W29	ASSY,ANT CABLE 7861R
CB801	09T35343Y16	WTB,IMSA9451B-16 -DB
CH401	09T25444Y15	BTB,55323-1511 -B
CH601	01T35001Y01	ASSY,UNIZ0N CONN 52R
CH802	01T25413Y01	ASSY,CONN 2P
DIN501	09T55493W02	DIN,SKT 8P CMS-R -DT
ET201	01T15332Y09	ASSY,WIRE RCA 7861R0 (R-OUT/SUB.W & FRONT OUT)
JK601	09T95460W01	JAC,HSJ0857-01-1010+
LCD401	65T25173Y03	LCD,WTD-17837H
M802	59T65085W01	MOTOR,LOAD FF-050SK (NOSE MOTOR/7V-370mA)
SFL1	65T25231Y01	SFL,XQ050-56004A -DB
SW405	40T45670W13	SPL,EC11B15243 -DB (ROTARY ENCODER/MODE • LOUD)
SW601	40T15494Y02	SW,DETCT SPVG13 -E6 (NOSE OPEN DET)
SW602	40T15494Y01	SW,DETCT SPVG23 -E6 (NOSE CLOSE DET)

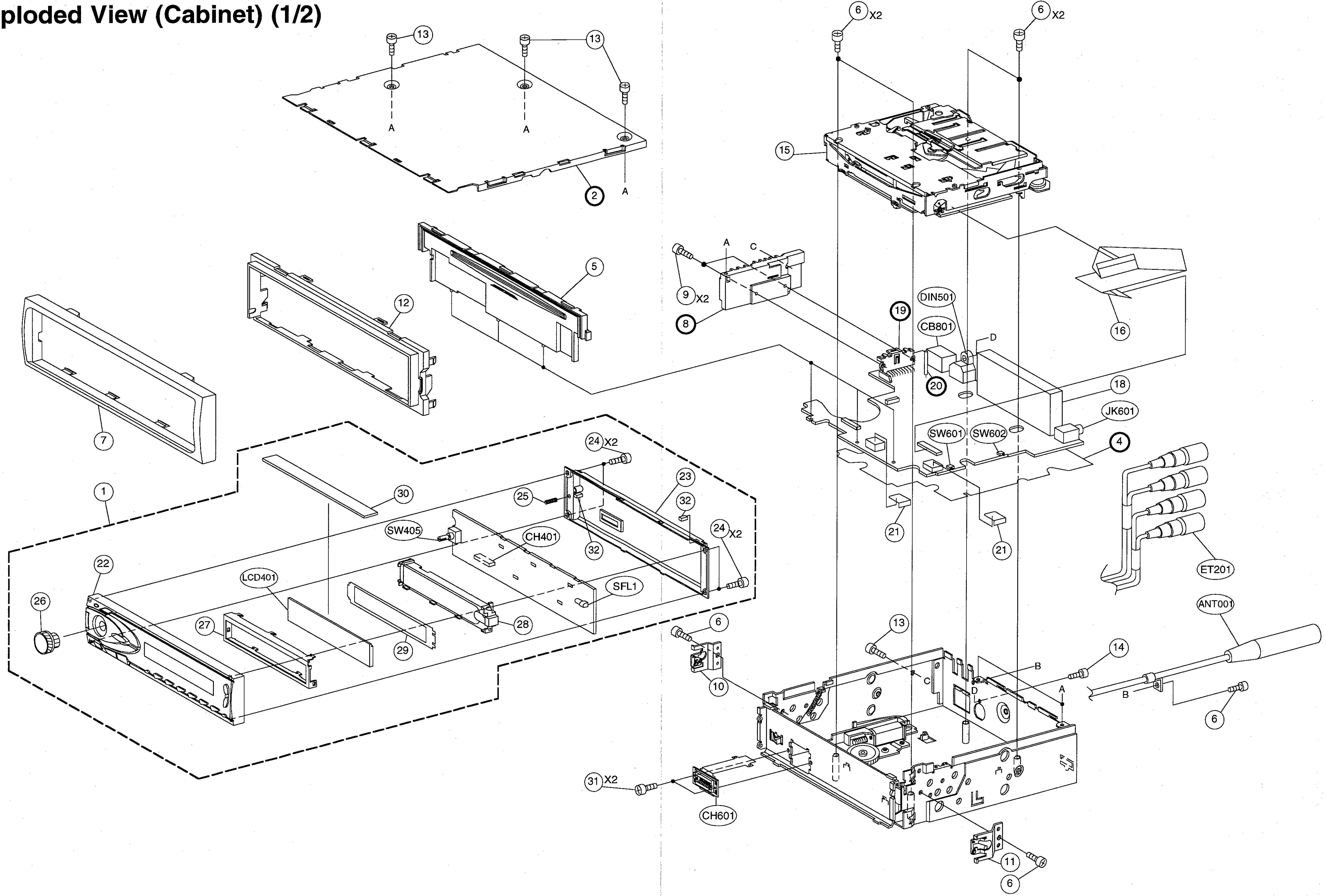
Cabinet Assembly Parts List

Symbol No.	Index	Part No.	Description
1		01V36600Y87	ASSY,NOSEUNIT 61R(S)
5		13C21370Y02	NOSE,BASE(CD) ASSY
6		03S44205G07	SCR,T-TITE M2.6X5
7		33C10618Y03	FACE,PLATE
9		03S38013W05	SCR,T-TITE M2.6X16
10		07D91595W01	BKT,SIDE ASSY
11		07D91595W02	BKT,SIDE(R) ASSY
12		13D21372Y01	NOSE,BASE COVER
13		03S71677F02	SCR,T-TITE-B M2.6X6
14		03S68555F16	SCR,WAVE M2.6X8
15		81D30307Y01	DP23S070,CD MECH
16		30T25456Y13	SMCD-22X157-BDX6(BL)
18		77C31331Y01	MB4R605A (TU001)
21		26A31722Y01	SHIELD,PLATE
22		13D31424Y06	NOSE,PIECE ASSY
23		13D31239Y01	NOSE,BOTTOM
24		03S68555F20	SCR,WAVE M1.7X5
25		41A50111W10	SPRING,KNOB
26		36C31240Y01	KNOB,VOL ASSY
27		15B20787Y02	COVER,LCD
28		15D20785Y01	CASE,LCD ASSY
29		26A20786Y01	REFLECTOR,SHEET
30		75T85248W10	RUBBER,ELECTRIC
31		03S94385F77	SCR,NYLOK M1.7X3
32		75S21219Y91	CUS,RUBBER 5X3XT2
100		01C21375Y03	ASSY,BKT F BASE
101		07B21380Y01	BKT,SLIDER
102		07B20734Y01	BKT,BASE L
103		07B20734Y02	BKT,BASE R
104		07A21381Y01	BKT,ARM(L)
105		07A21381Y02	BKT,ARM(R)
106		04B41345P54	WASHER,LOCK
107		03A20851Y02	SCR,SLIDER
108		49A22103Y01	ROLLER,SLIDER FRONT
109		44A20248Y01	GEAR,SLIDER
110		44T25192Y01	GEAR,CLUTCH ASSY
111		07C20740Y01	BKT,MOTOR
112		44A90467W02	GEAR,WORM
113		03S68259F23	SCR,P-LOCK M2X3
114		03S94385F13	SCR,NYLOK M2.6X3
115		41A22014Y01	SPRING,EXTENSION
116		03S94385F24	SCREW,NYLOK
117		14S11351Y95	INS,CVR 8X6XT0.25
118		75S21219Y48	CUS,RUB(9X4.5XT2)

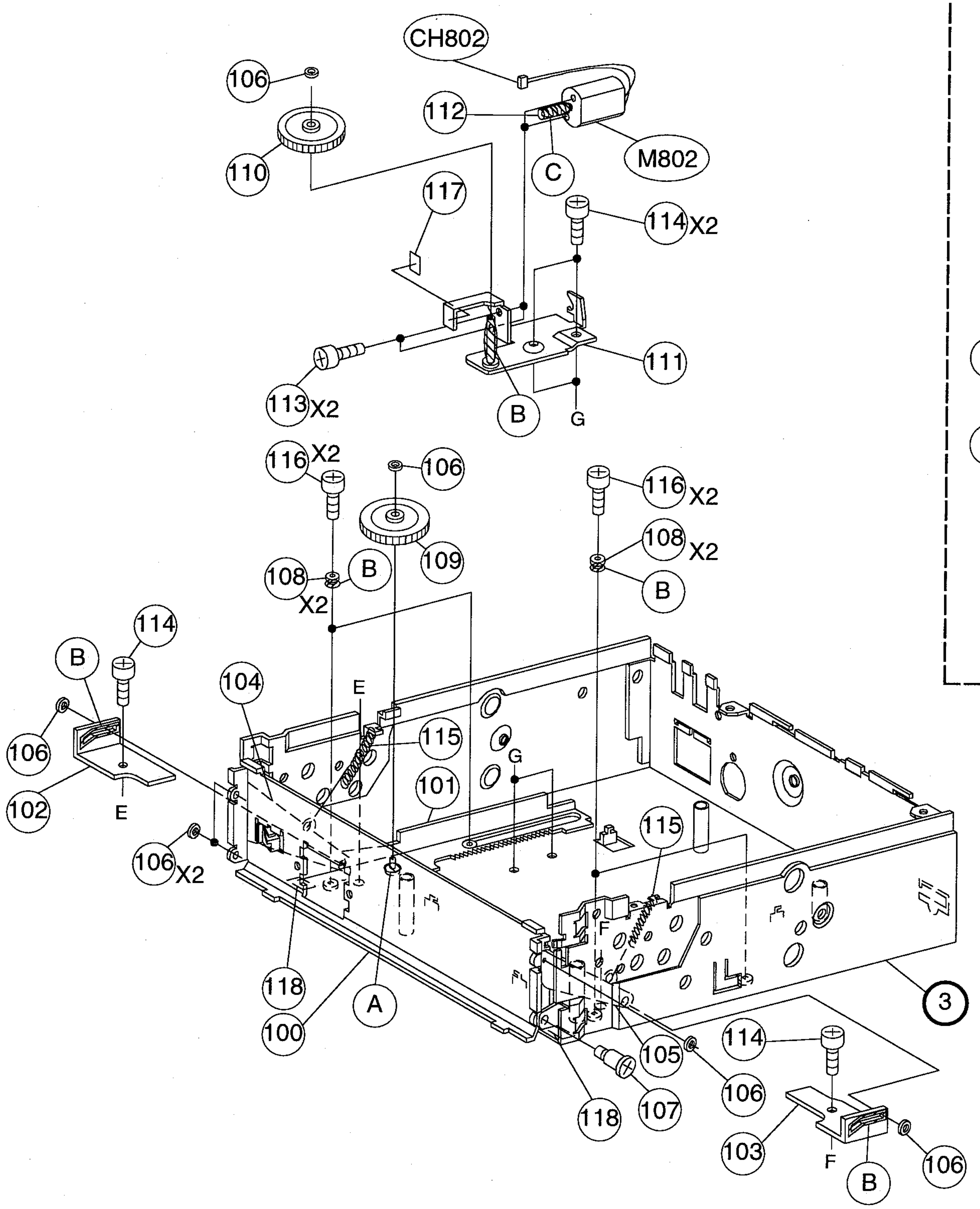
NOTE:Parts without part number are not supplied.

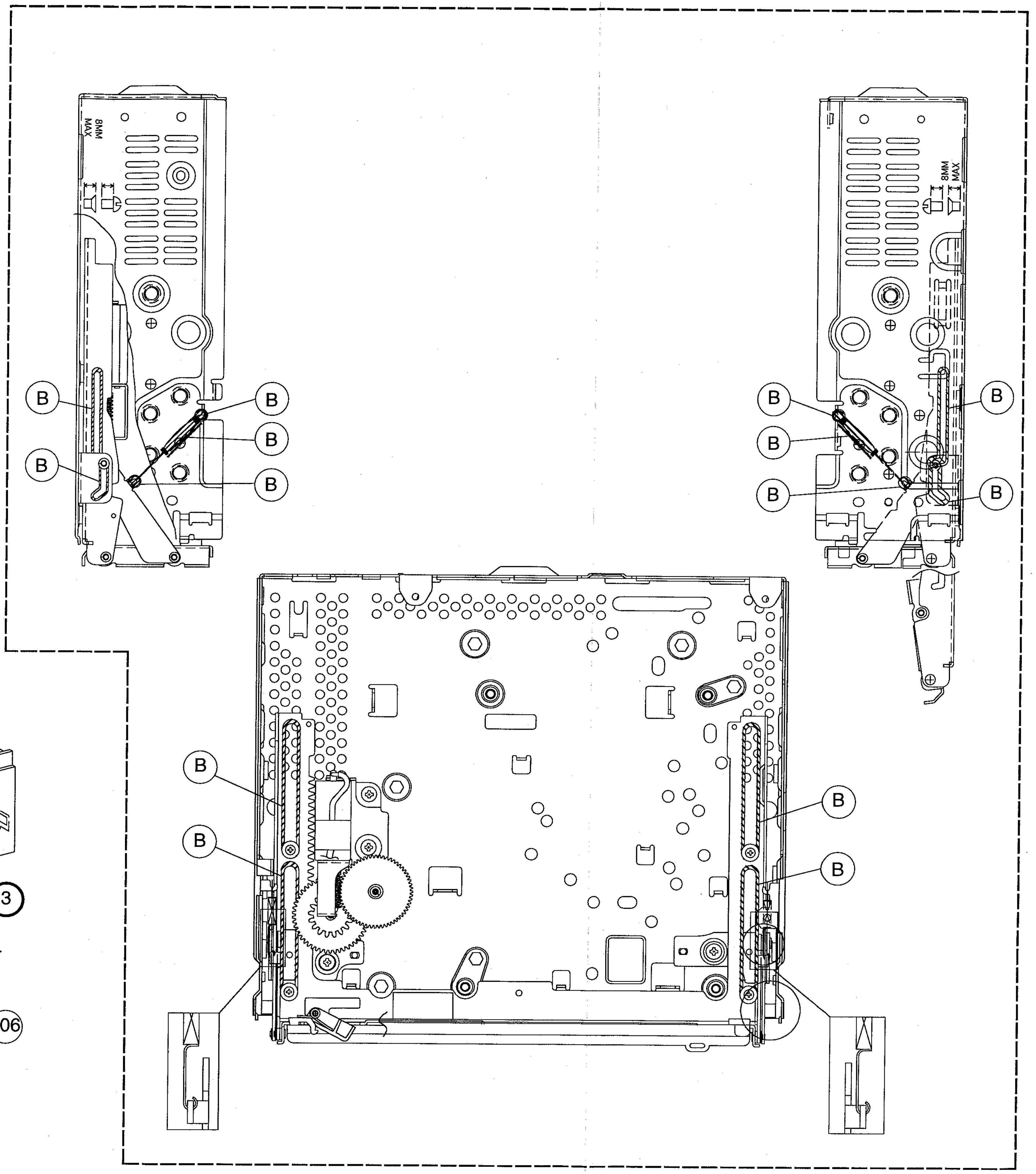
Symbol No.	Index	Part No.	Description

Exploded View (Cabinet) (1/2)


13
13
A
A
A
2
6 X2
6 X2
15
5
12
A
C
9 X2
8
19
DIN501
CB801
D
16
20
18
7
JK601
SW601
SW602
4
1
24 X2
30
23
25
32
32
21
21
SW405
CH401
24 X2
ET201
22
LCD401
SFL1
26
27
28
29
ANT001
6
13
14
10
B
C
D
A
B
6
31 X2
CH601
11
6

Exploded View (Cabinet) (2/2)


CH802
106
112
M802
110
C
117
114 X2
111
113 X2
B
G
116 X2
106
109
116 X2
108 X2
B
108 X2
B
114
B
104
E
115
106
G
101
102
E
106 X2
115
118
A
100
3
105
114
106
118
107
103
F
B
106


8MM MAX
B
B
B
B
B
8MM MAX
B
B
B
B
B
B
B
B
B

▨ ....point of GREASE applied.

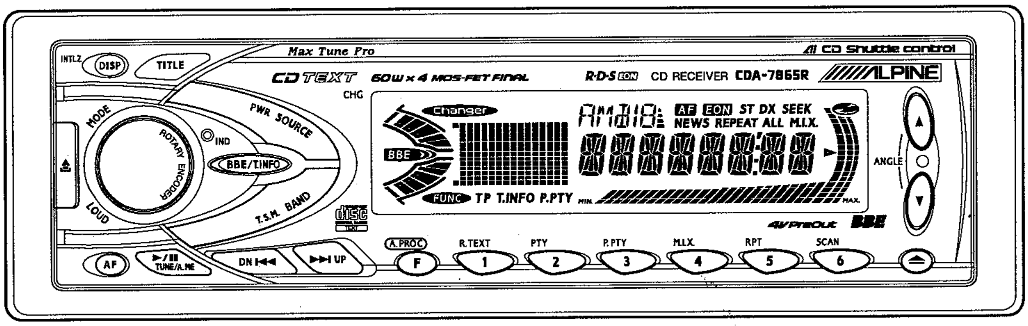
Ⓐ	GREASE, FG-53C (11S20853Y01)
Ⓑ	GREASE, E PASTE (11S42419J09)
Ⓒ	GREASE SILICON (11S490487)

ALPINE

SERVICE MANUAL

FM/MW/LW/RDS CD Receiver

COMPACT
disc
DIGITAL AUDIO
TEXT


Max Tune Pro
All CD Shuttle control
INTLZ
DISP
TITLE
CD TEXT
60W x 4 MOS-FET FINAL
R·D·S EON
CD RECEIVER CDA-7865R
ALPINE
CHG
MODE
PWR SOURCE
ROTARY ENCODER
IND
BBE/T.INFO
T.S.M. BAND
LOUD
changer
BBE
FUNC
AF
EON
ST DX SEEK
NEWS REPEAT ALL M.I.X.
TP T.INFO P.PTY
MIN.
MAX.
ANGLE
4V PreOut
BBE
AF
►/II TUNE/A.ME
DN I◄◄
►►I UP
A.PROC
F
R.TEXT
1
PTY
2
P.PTY
3
M.I.X.
4
RPT
5
SCAN
6

CDA-7865R

Contents

Packing Assembly Parts List 3
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Specifications 4, 5
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Adjustment Locations 7
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Parts Layout on P.W.Boards and Wiring Diagram .... 9~18
Schematic Diagram .... 19~30
Terminal Voltage of IC/TR .... 31~37
Description of IC Terminal .... 38~45
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Cabinet Assembly Parts List 58
Exploded View (Cabinet) .... 59~62
Exploded View (CD Deck Mechanism) (DP23S070) 63, 64
CD Deck Mechanism Assembly Parts List 65

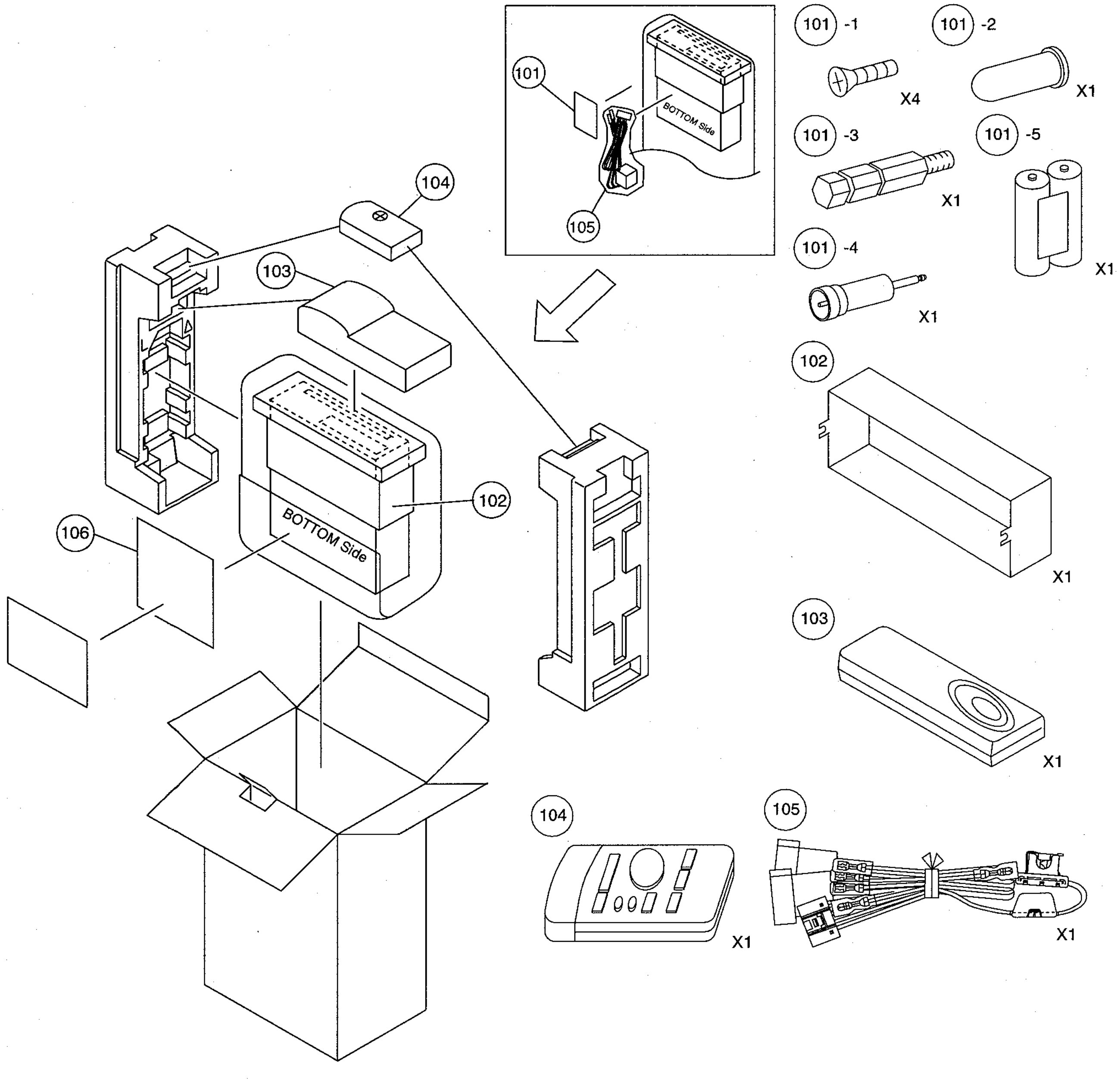
NOTE : Due to continuing product improvement, specifications and designs are subject to change without notice.

Packing Assembly Parts List

Symbol No.	Part No.	Description
101-1	03S72235F13	SCR, MCH M5X8 FLAT
101-2	36A11113W01	CAP, RUBBER (A)
101-3	03A11112W01	BOLT, HEX. M5 (A)
101-4	01T15394Y02	ANT, JASO-ISO
101-5	60T55630W01	BAT, MGN R03 (NB) UM-4

Symbol No.	Part No.	Description
102	15D50406W01	CASE, INNER
103	15D10867Y01	CARRING, CASE
104	01T00716K02	ASSY, REMOCON
105	01T35536Y01	ASSY, WIRE ISO 65RO
106	68P01149K85	O/M AOEU AODN

Packing Method View


101
105
BOTTOM Side
104
103
102
BOTTOM Side
106
101 -1
X4
101 -2
X1
101 -3
X1
101 -5
X1
101 -4
X1
102
X1
103
X1
104
X1
105
X1

Specifications

<CD SECTION>

System	Optical (Compact Disc System)
Quantizing Bit Number	16bit Linear system
Channels	2 Channels
Channel Balance (1kHz)	0±3dB
Distortion (1kHz)	0.1%
Frequency Response (Ref. 1kHz)	17Hz : 0±3dB 127Hz : 0±2dB 10.007kHz : 0±2dB 19.997kHz : 0±4dB
S/N Ratio	95dB
Separation (1kHz)	55dB
De-Emphasis (Ref. 1kHz)	4kHz : -20±3dB 16kHz : -20±3dB

<FM RADIO>

Intermediate Frequency	10.7±0.1MHz
Frequency Range	87.5~108MHz
Usable Sensitivity (Mono, 30dB S/N, at 98.1MHz)	17.2dBf
-3dB Limiting Sensitivity (at 98.1MHz)	21.2dBf
Residual Noise (Ref. 400Hz, narrow, at 98.1MHz)	25±10dB
S/N Ratio (Stereo, at 98.1MHz)	55dB
Image Rejection (at 106.1MHz)	40dB
IF Rejection (at 90.1MHz)	60dB
Distortion (Input 60dBμ, at 98.1MHz)	1%
Frequency Response (Ref. 400Hz, at 98.1MHz)	100Hz : 0±3dB 10kHz : -12±3dB
Stereo Separation (1kHz, at 98.1MHz)	20dB
PS Sensitivity (at 98.1MHz)	36.2dBf

<MW RADIO>

Intermediate Frequency	1st. : 10.7MHz 2nd. : 450kHz
Frequency Range	531~1,602kHz
Usable Sensitivity (20dB S/N, at 999kHz)	34dB
S/N Ratio (at 999kHz)	44dB
Image Rejection (at 1,404kHz)	50dB
IF Rejection (at 603kHz)	60dB
Distortion (at 999kHz)	1.5%
Frequency Response (Ref. 400Hz, at 999kHz)	100Hz : -3±4dB 4kHz : -11+6, -12dB

<LW RADIO>

Intermediate Frequency	1st. : 10.7MHz 2nd. : 450kHz
Frequency Range	153~281kHz
Usable Sensitivity (20dB S/N, at 216kHz)	42dB
S/N Ratio (at 216kHz)	44dB
Image Rejection (at 270kHz)	50dB
IF Rejection (at 162kHz)	60dB
Distortion (at 216kHz)	1.5%
Frequency Response (Ref. 400Hz, at 216kHz)	100Hz : -3±4dB 4kHz : -11+6, -12dB

<GENERAL>

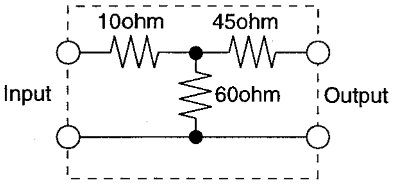
Power Supply	DC14.4V
Power Output (T.H.D. 10%, TCD-782 (0dB, 1kHz)) /Impedance	25W/ch/4ohm
Pre Output (T.H.D. 1%, TCD-782 (0dB, 1kHz)) /Impedance	5V±2.5dBV/10Kohm
Dimensions (W×H×D)	Chassis : 178×50×158mm Nose : 188×58×26.8mm
Weight	1.5kg

NOTE : Due to Continuing product improvement, specifications and designs are subject to change without notice.

Adjustment Procedures

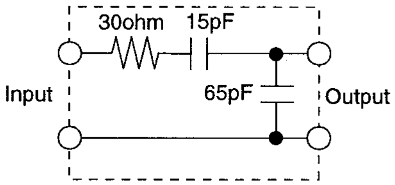
1. FM/AM SECTION

(1) Dummy Antenna Circuit


10ohm
45ohm
60ohm
Input
Output

For 50 ohm FM Signal Generator

Figure 1


30ohm
15pF
65pF
Input
Output

For 50 ohm AM Signal Generator

Figure 2

(2) Connections

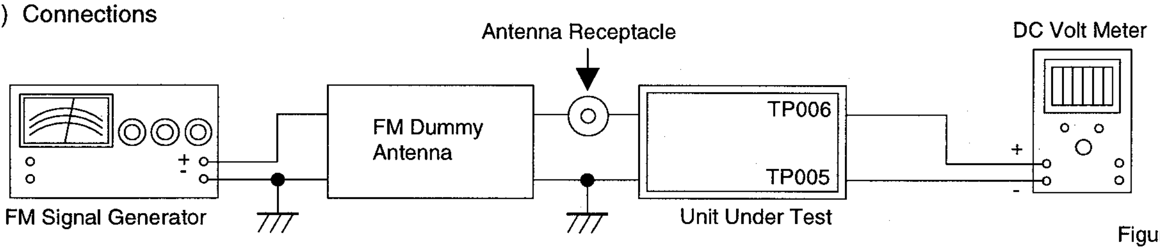

Antenna Receptacle
DC Volt Meter
FM Dummy Antenna
TP006
TP005
+
-
FM Signal Generator
Unit Under Test

Figure 3

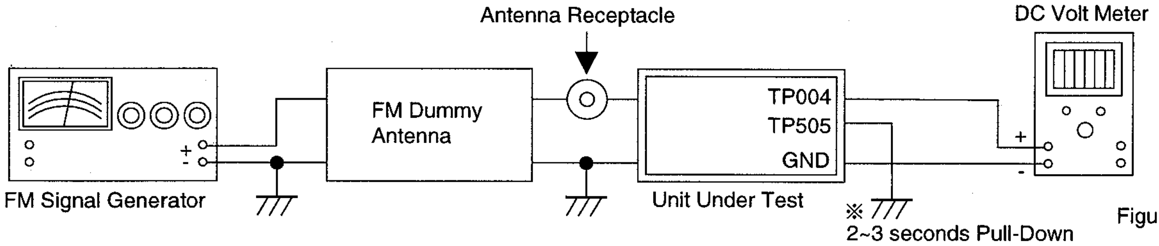

Antenna Receptacle
DC Volt Meter
FM Dummy Antenna
TP004
TP505
GND
+
-
FM Signal Generator
Unit Under Test
※
2~3 seconds Pull-Down

Figure 4

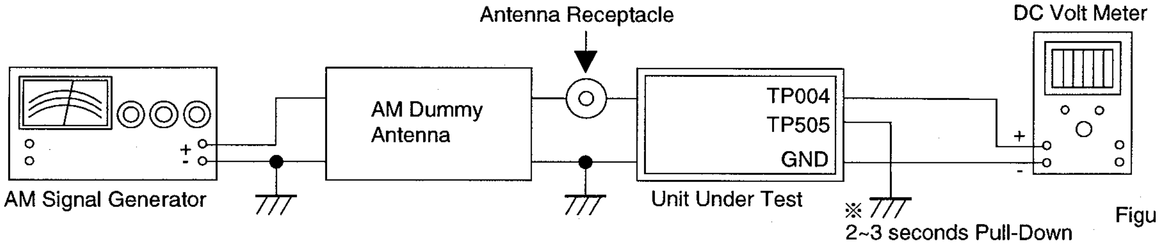

Antenna Receptacle
DC Volt Meter
AM Dummy Antenna
TP004
TP505
GND
+
-
AM Signal Generator
Unit Under Test
※
2~3 seconds Pull-Down

Figure 5

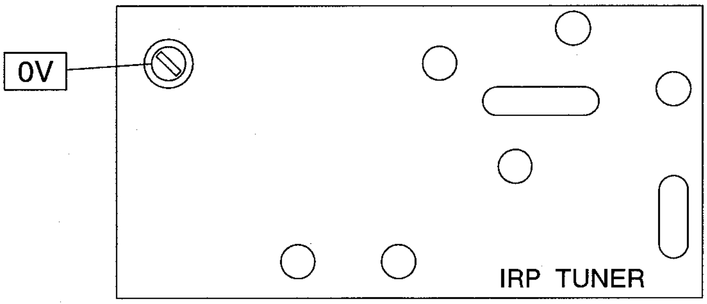
(3) Control Settings

Power Switch	ON	Band Switch	FM/AM (MW)
Fader Control	Center Position	BBE Switch	OFF
Balance Control	Center Position	LOUD Switch	OFF
Treble Control	Center Position	Others	OFF
Bass Control	Center Position		

(4) Adjustment Procedures

Step	Description	Connection	Signal Generator		Dial Control	Test Point / P.W.Board Coordinates	Adjustment
1	IF Adjustment	Figure 3	98.1MHz, 72dBμ (Mod. 400Hz, Dev. 40kHz)		98.1MHz	TP005 (1-B) TP006 (1-B)	Adjust $\boxed{\text{0V}}$ to 0±30mV.
2	Signal Meter Adjustment	Figure 4	98.1MHz, 51dBμ (Mod. 400Hz, Dev. 40kHz → Mod. OFF)		98.1MHz	TP004 (1-B) TP505 (1-C)	Auto Adjustment : After setting up of Signal Genarator, short GND and TP505 (Pull-Down) for 2~3 seconds. (SPEC) TP004 : 3±0.1V
3	AM Signal Meter Adjustment	Figure 5	(1)	999kHz, 30dBμ (Mod. 400Hz, 30% → Mod. OFF)	999kHz	TP004 (1-B) TP505 (1-C)	Auto Adjustment : After setting up of Signal Genarator, short GND and TP505 (Pull-Down) for 2~3 seconds.
			(2)	999kHz, 32dBμ (Mod. 400Hz, 30% → Mod. OFF)	999kHz	TP004 (1-B) TP505 (1-C)	Proceed same Auto Adjustment of step (1) under step (2). (SPEC) TP004 : 1.8±0.1V → OK (SPEC) TP004 : others 1.8±0.1V → NG NOTE : NG : Proceed same Auto Adjustment of step (1) under step (3).
			(3)	999kHz, 27~29dBμ (Mod. 400Hz, 30% → Mod. OFF)	999kHz	TP004 (1-B) TP505 (1-C)	Proceed same Auto Adjustment of step (1) under step (3).
			(4)	999kHz, 32dBμ (Mod. 400Hz, 30% → Mod. OFF)	999kHz	TP004 (1-B) TP505 (1-C)	Proceed same Auto Adjustment of step (1) under step (4).

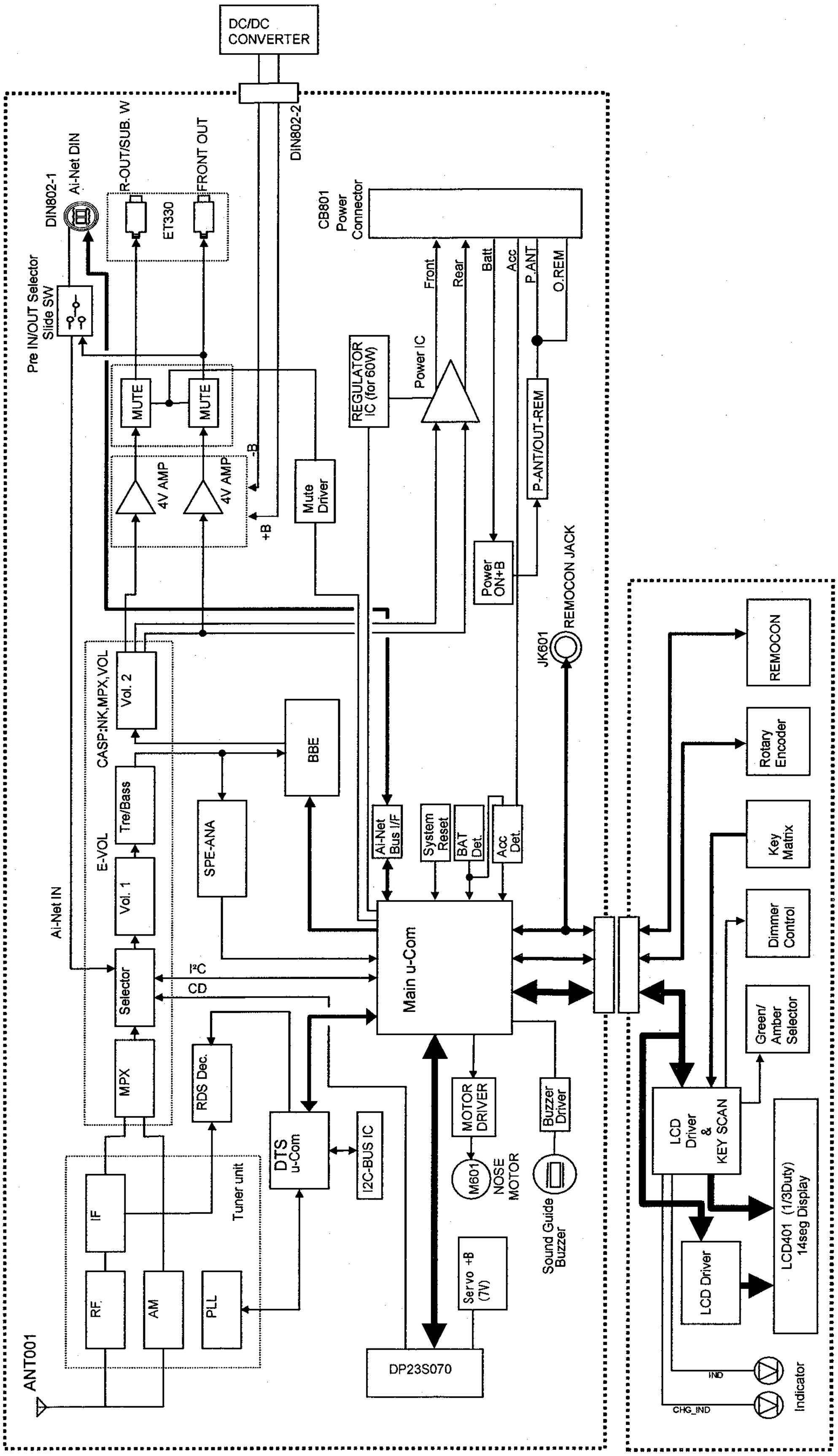
Adjustment Locations



FM/MW/LW Tuner Unit, MB4R9030 (TU001)

NOTE : For the Test Points, refer to the Parts Layout on P.W.Boards and Wiring Diagram.

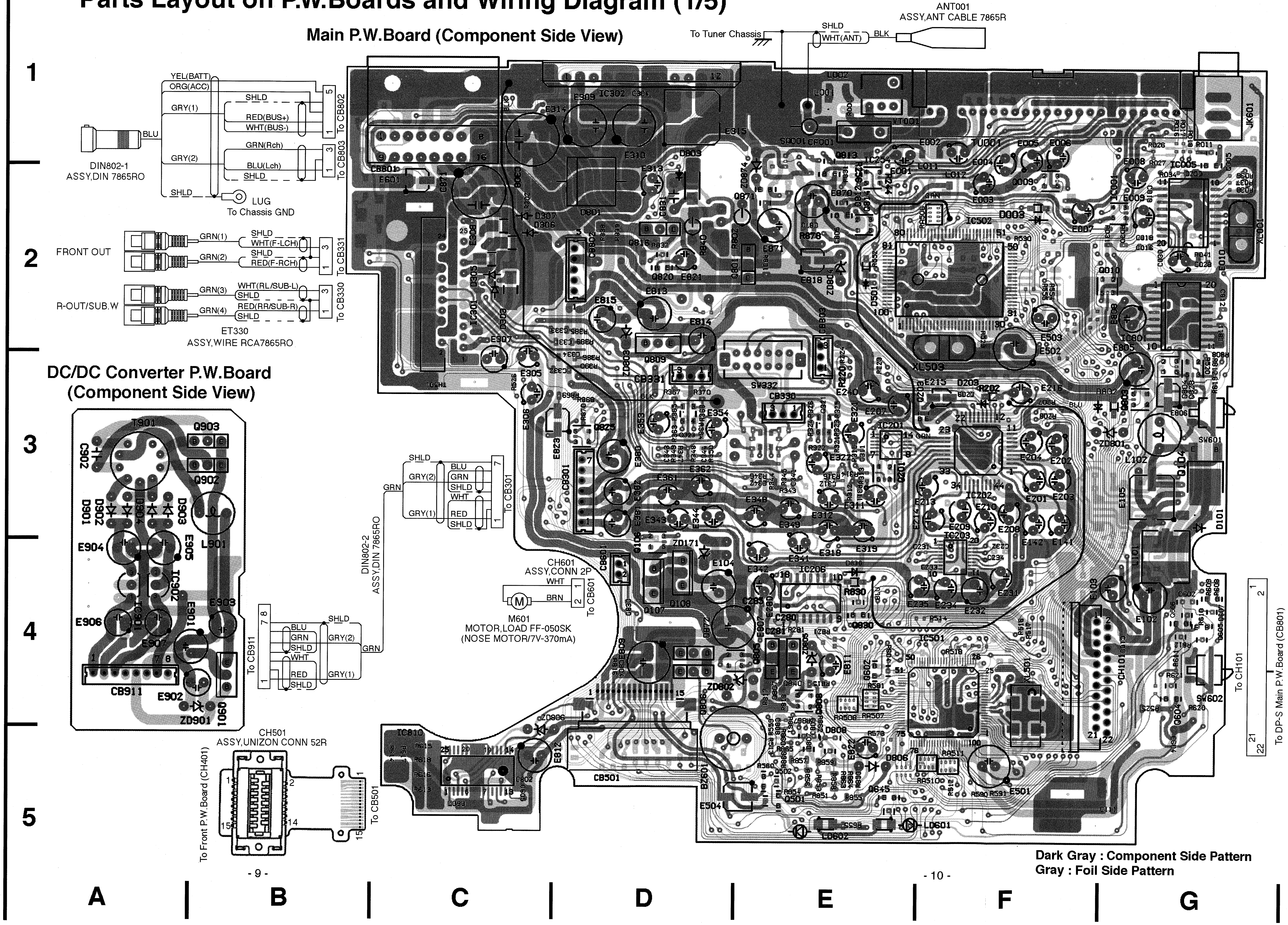
Block Diagram


DC/DC CONVERTER
DIN802-2
DIN802-1
Ai-Net DIN
R-OUT/SUB. W
FRONT OUT
ET330
CB801 Power Connector
Pre IN/OUT Selector Slide SW
Front
Rear
Batt
Acc
P.ANT
O.REM
MUTE
MUTE
REGULATOR IC (for 60W)
Power IC
-B
+B
4V AMP
4V AMP
Mute Driver
P-ANT/OUT-REM
Power ON+B
REMOCON JACK
JK601
CASP:NK,MPX,VOL
Vol. 2
BBE
Tre/Bass
E-VOL
Vol. 1
SPE-ANA
Ai-Net IN
Ai-Net Bus I/F
System Reset
BAT Det.
Acc Det.
Main u-Com
Selector
I²C
CD
MPX
RDS Dec.
DTS u-Com
I2C-BUS IC
MOTOR DRIVER
M601
NOSE MOTOR
Buzzer Driver
Sound Guide Buzzer
Tuner unit
IF
RF.
AM
PLL
ANT001
Servo +B (7V)
DP23S070
REMOCON
Rotary Encoder
Key Matrix
Dimmer Control
Green/ Amber Selector
LCD Driver & KEY SCAN
LCD401 (1/3Duty) 14seg Display
LCD Driver
IND
CHG_IND
Indicator

Parts Layout on P.W.Boards and Wiring Diagram (1/5)

Main P.W.Board (Component Side View)

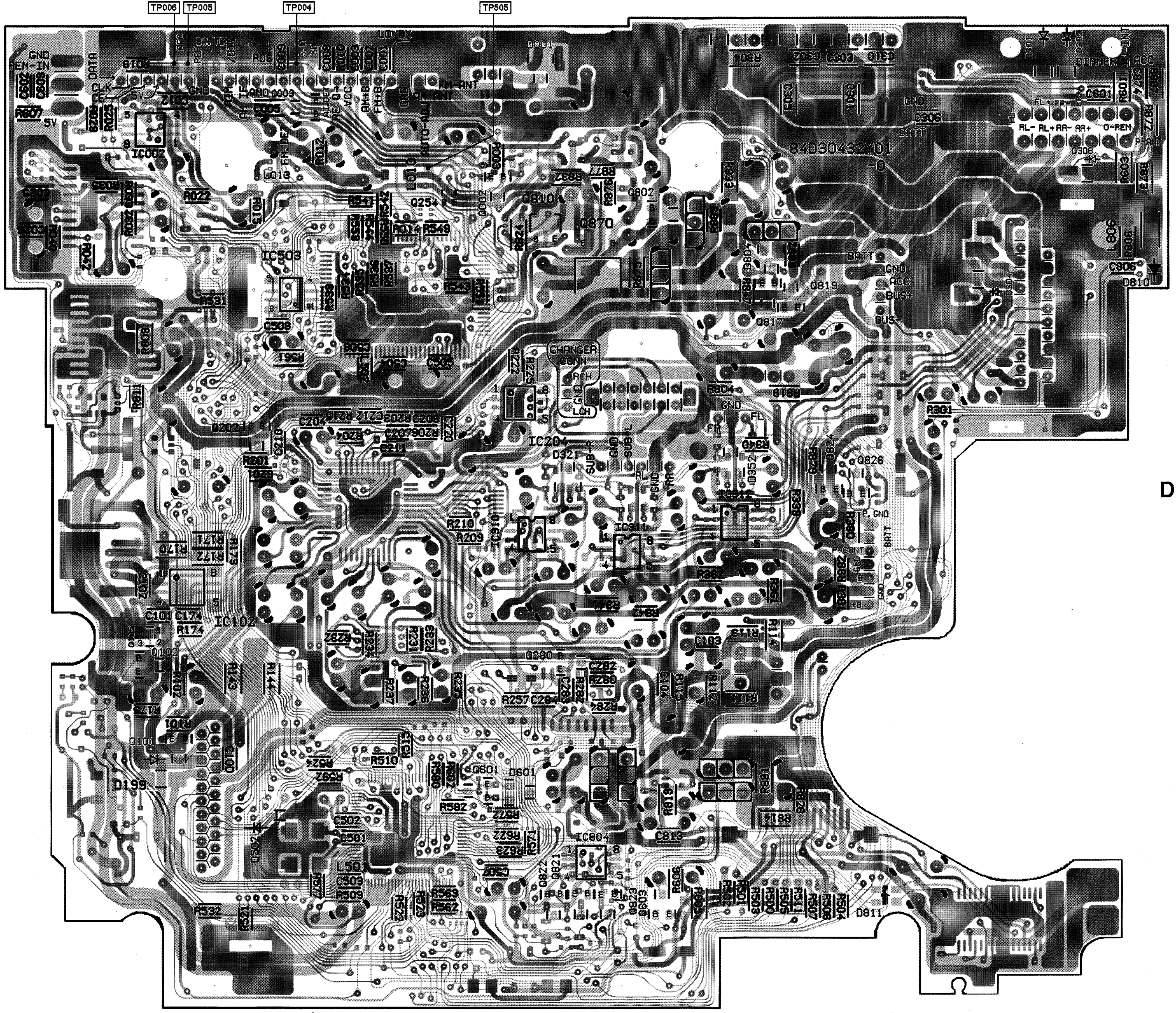
DC/DC Converter P.W.Board (Component Side View)


1
2
3
4
5
A
B
C
D
E
F
G
ANT001
ASSY,ANT CABLE 7865R
To Tuner Chassis
SHLD
WHT(ANT)
BLK
YEL(BATT)
ORG(ACC)
GRY(1)
SHLD
RED(BUS+)
WHT(BUS-)
BLU
GRN(Rch)
GRY(2)
BLU(Lch)
SHLD
To CB802
To CB803
DIN802-1
ASSY,DIN 7865RO
SHLD
LUG
To Chassis GND
FRONT OUT
GRN(1)
GRN(2)
SHLD
WHT(F-LCH)
SHLD
RED(F-RCH)
To CB331
R-OUT/SUB.W
GRN(3)
GRN(4)
WHT(RL/SUB-L)
SHLD
RED(RR/SUB-R)
SHLD
To CB330
ET330
ASSY,WIRE RCA7865RO
SHLD
GRY(2)
GRN
BLU
GRN
SHLD
WHT
GRY(1)
RED
SHLD
To CB301
DIN802-2
ASSY,DIN 7865RO
CH601
ASSY,CONN 2P
WHT
BRN
M
To CB601
M601
MOTOR,LOAD FF-050SK
(NOSE MOTOR/7V-370mA)
To CB911
BLU
GRN
SHLD
WHT
RED
SHLD
SHLD
GRY(2)
GRY(1)
GRN
CH501
ASSY,UNIZON CONN 52R
To Front P.W.Board (CH401)
To CB501
To CH101
To DP-S Main P.W.Board (CB801)
T901
Q903
Q902
C902
D901
D902
D903
L901
E904
E905
IC902
E906
E901
E903
E907
CB911
E902
ZD901
Q901
CB801
CB802
CB803
CB301
CB330
CB331
CB501
CB601
IC302
IC301
IC501
IC502
IC201
IC202
IC203
IC206
IC801
IC810
IC001
IC005
TU001
JK601
XL001
XL501
XL503
SW332
SW601
SW602
CH101
BZ601
LD601
LD602
E501
E504
E812
E815
E814
E813

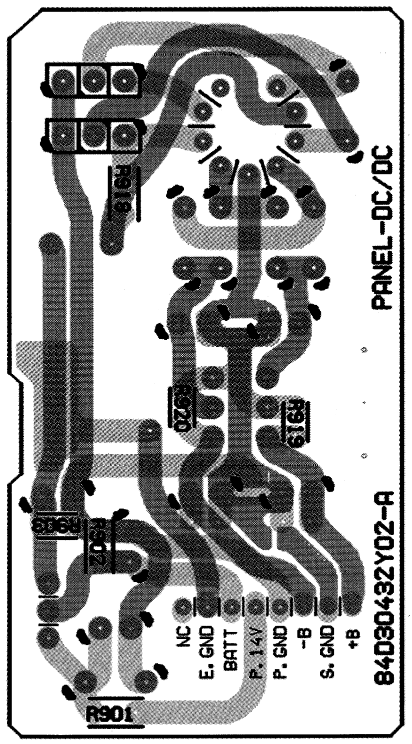
Dark Gray : Component Side Pattern
Gray : Foil Side Pattern

Parts Layout on P.W.Boards and Wiring Diagram (2/5)

Main P.W.Board (Foil Side View)


TP006
TP005
TP004
TP505
GND
REM-IN
DATA
CLK
CE
5V
IC002
IC503
IC204
IC310
IC311
IC312
IC102
IC804
CHANGER CONN
RCH
LCH
SUB-R
SUB-L
RL
RR
FR
FL
BATT
GND
ACC
BUS+
BUS-
P.GND
P.CONT
AM ANT
FM ANT
AUTO-ADJ
DIMMER
ILL
RL- RL+ RR- RR+ O-REM
P-ANT
84D30432Y01
Q810
Q870
L806
D810
D811
D199
L501
D601
Q601

DC/DC Converter P.W.Board (Foil Side Vie)


PANEL-DC/DC
84D30432Y02-A
NC
E.GND
BATT
P.14V
P.GND
-B
S.GND
+B
R901
R918
R919
R920
R902
R903

Dark Gray : Component Side Pattern
Gray : Foil Side Pattern

1
2
3
4
5

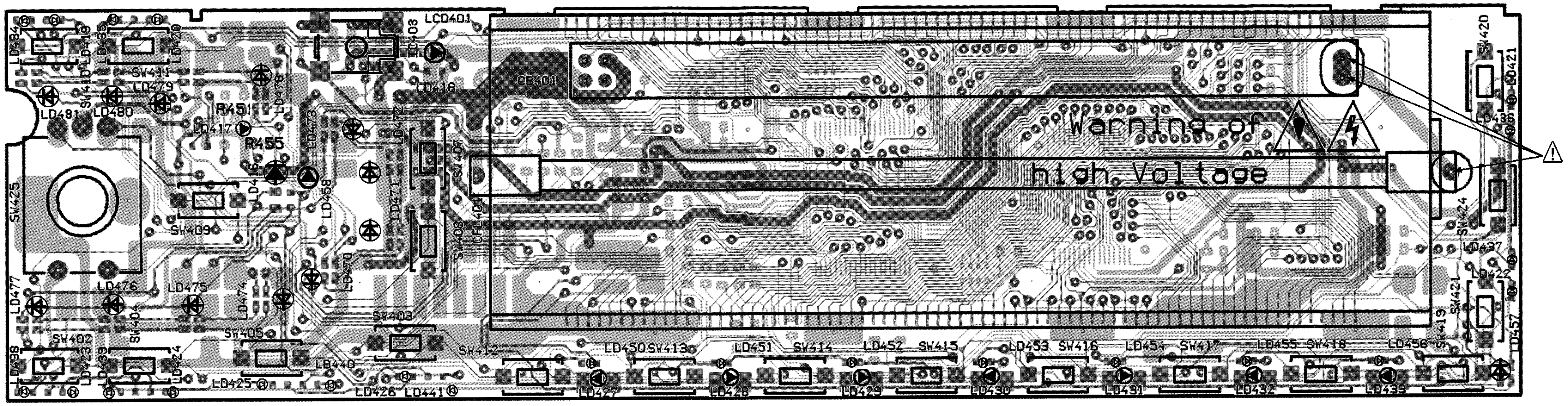
A
B
C
D
E
F
G

Parts Layout on P.W.Boards and Wiring Diagram (3/5)

Caution : The part marked with ⚠ is generating a high voltage,
so care will be necessary when working.

1

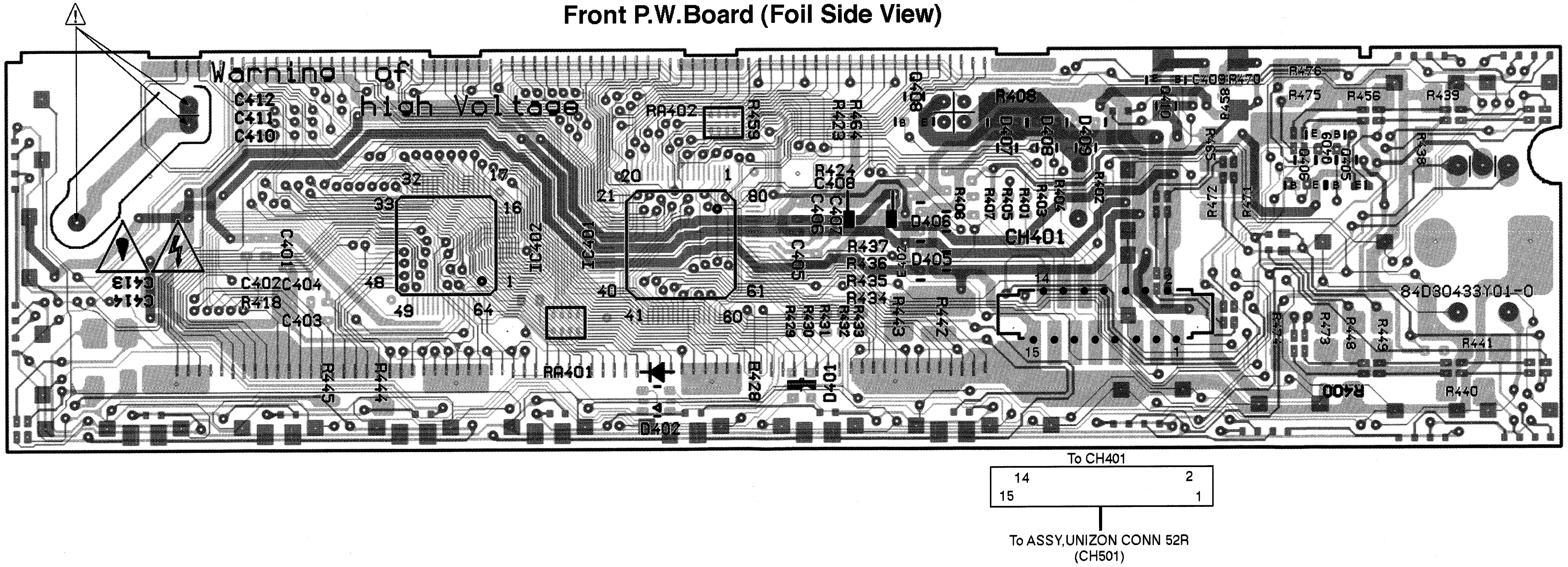
Front P.W.Board (Component Side View)


LD434
LD419
LD435
LD420
SW410
SW411
LD479
LD481
LD480
R451
LD417
R455
LD478
LD473
LD416
LD458
LD472
LD471
LD470
IC403
LCD401
LD418
CB401
SW407
SW408
CFL401
SW425
SW409
LD477
LD476
LD475
LD474
SW404
SW405
SW403
SW402
LD438
LD423
LD439
LD424
LD425
LD440
LD426
LD441
SW412
LD450
SW413
LD451
SW414
LD452
SW415
LD453
SW416
LD454
SW417
LD455
SW418
LD456
SW419
LD427
LD428
LD429
LD430
LD431
LD432
LD433
Warning of
high Voltage
SW420
LD421
LD436
SW424
LD437
LD422
SW421
LD457
⚠

2

3

Front P.W.Board (Foil Side View)


⚠
Warning of
high Voltage
C412
C411
C410
C413
C414
C401
C402
C404
R418
C403
R445
R444
IC402
32
17
33
16
48
1
49
64
IC401
20
1
21
80
40
61
41
60
RA402
R459
R464
R423
R424
C408
C407
C406
C405
R437
R436
R435
R434
R433
R432
R431
R430
R429
R428
R443
R442
RA401
D401
D402
Q408
R408
D407
D408
D409
R406
R405
R401
R407
R403
R404
R402
D406
D405
CH401
14
15
1
C409
R470
R476
R475
R456
R439
R458
Q410
R455
R472
R471
Q409
Q405
Q406
R438
84D30433Y01-0
R474
R473
R448
R449
R441
R440
R400
To CH401
14
2
15
1
To ASSY,UNIZON CONN 52R
(CH501)

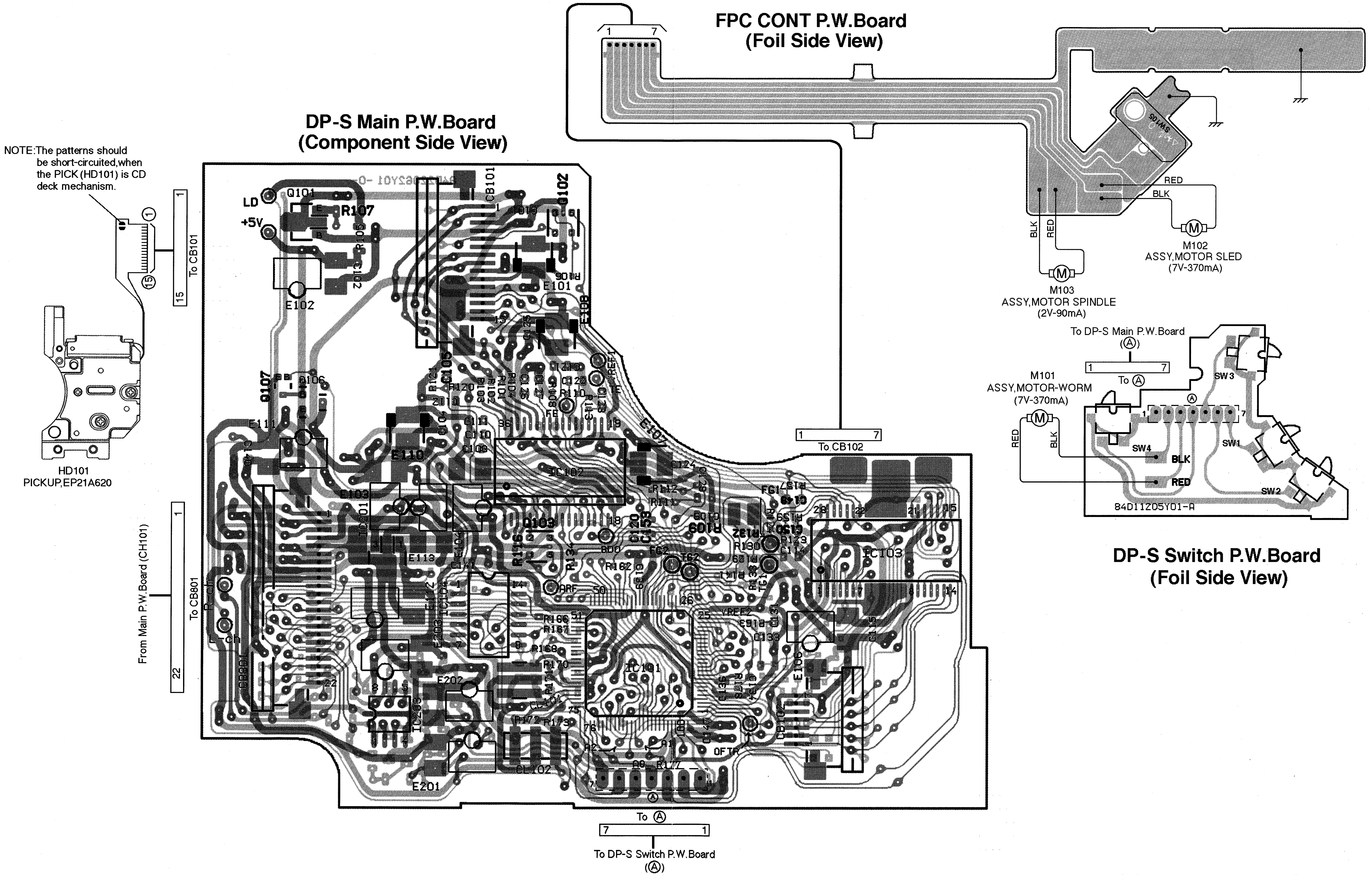
4

5

Dark Gray : Component Side Pattern
Gray : Foil Side Pattern

A | B | C | D | E | F | G

Parts Layout on P.W.Boards and Wiring Diagram (4/5)


FPC CONT P.W.Board
(Foil Side View)
DP-S Main P.W.Board
(Component Side View)
DP-S Switch P.W.Board
(Foil Side View)
NOTE:The patterns should be short-circuited,when the PICK(HD101) is CD deck mechanism.
To CB101
1
15
HD101
PICKUP,EP21A620
From Main P.W.Board (CH101)
To CB801
1
22
LD
+5V
Q101
R107
R105
Z012
E102
CB101
Q102
E101
E108
VREF1
Q107
Q106
E111
E110
E103
IC201
E113
IC104
E203
IC203
E202
E201
CL102
IC102
Q103
FG1
R109
IC103
IC101
E106
CB102
CB801
R-ch
L-ch
ARF
VREF2
OFTR
A0
A1
A2
R162
R166
R167
R168
R170
R172
R173
R111
R112
R130
R134
R136
R177
To Ⓐ
7
1
To DP-S Switch P.W.Board
(Ⓐ)
To CB102
1
7
RED
BLK
M102
ASSY,MOTOR SLED
(7V-370mA)
M103
ASSY,MOTOR SPINDLE
(2V-90mA)
SW105
To DP-S Main P.W.Board
(Ⓐ)
1
7
To Ⓐ
M101
ASSY,MOTOR-WORM
(7V-370mA)
SW1
SW2
SW3
SW4
84D11205Y01-A
A
B
C
D
E
F
G
1
2
3
4
5

Dark Gray : Component Side Pattern
Gray : Foil Side Pattern

Parts Layout on P.W.Boards and Wiring Diagram (5/5)

1

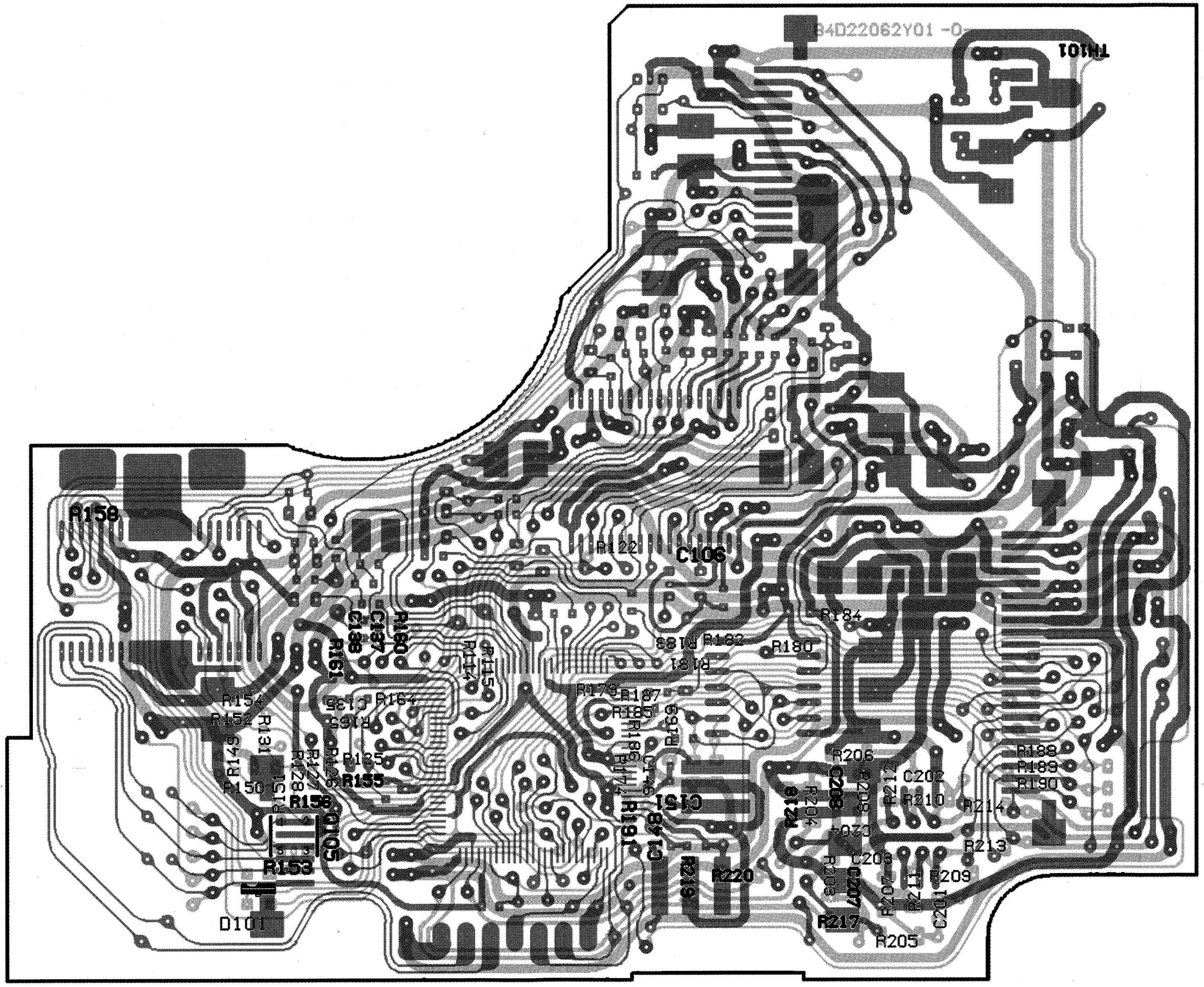
2

3

4

5

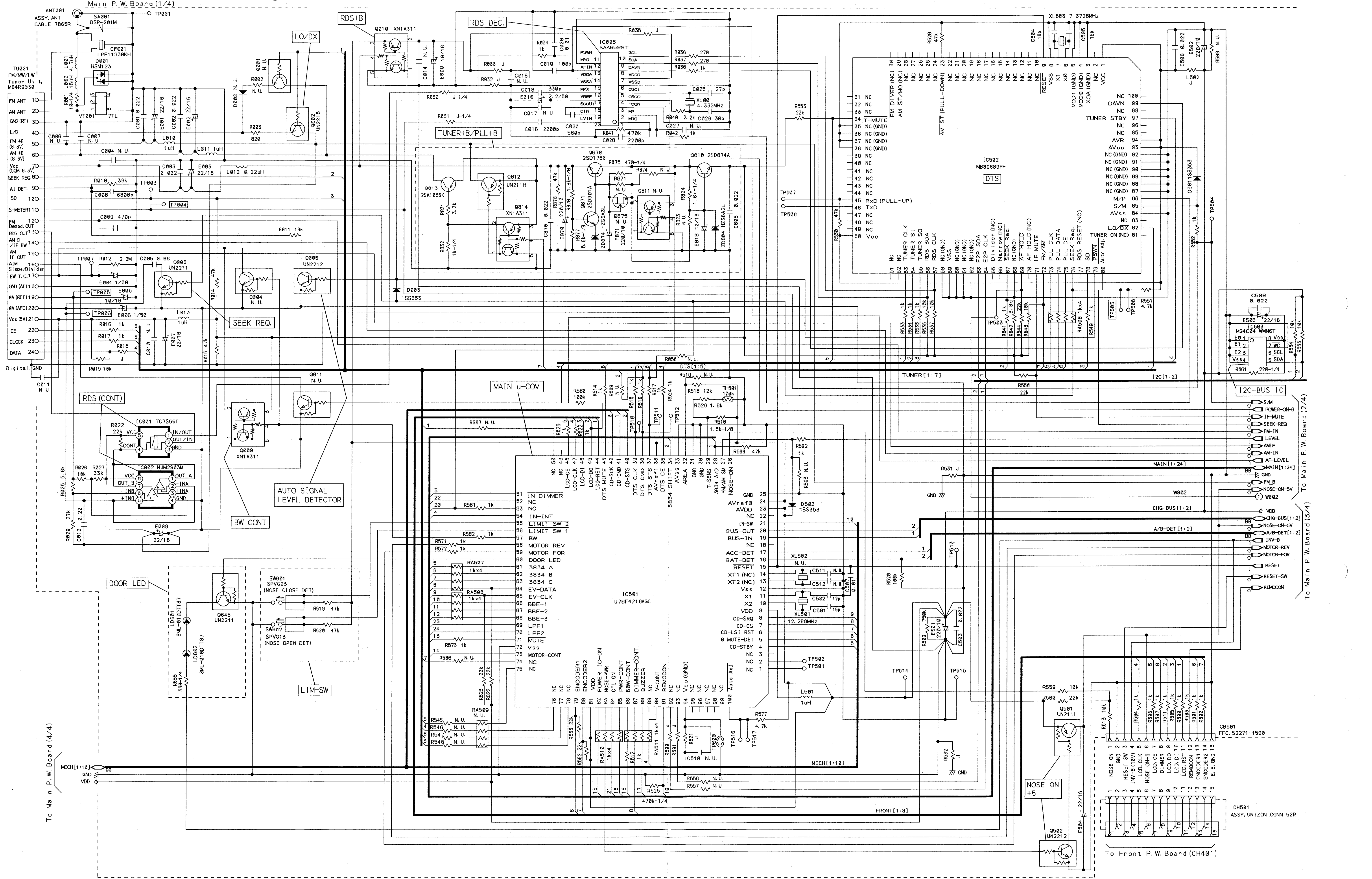
DP-S Main P.W.Board (Foil Side View)


34D22062Y01 -0-
TH101
R158
C138
C137
R160
R161
R114
R115
R122
C106
R154
R152
R131
R149
R150
IC151
R128
R127
R126
R125
R155
R156
R164
C135
R165
Q105
R153
D101
R179
R187
R185
R186
R174
C146
R169
R191
C148
C151
R219
R220
R188
R182
R181
R180
R184
R206
C208
R208
R212
C202
R210
R214
R218
R204
C204
C203
R203
C207
R217
R205
R207
R211
C201
R209
R213
R188
R189
R190

Dark Gray : Component Side Pattern
Gray : Foil Side Pattern

A | B | C | D | E | F | G

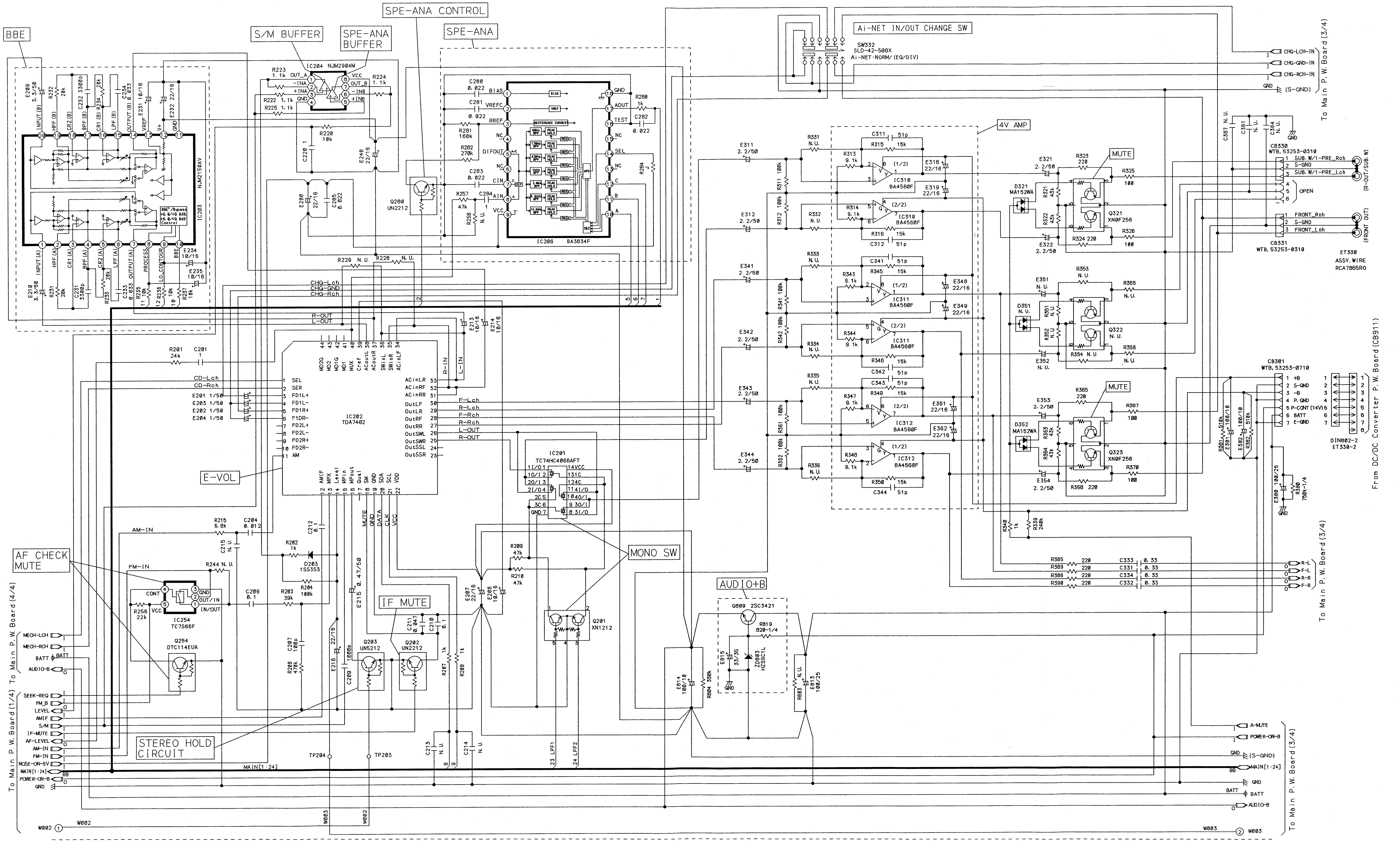
CDA-7865R Schematic Diagram (1/6)


Main P.W. Board (1/4)
ANT001 ASSY, ANT CABLE 7865R
TP001
SA001 DSP-201M
CF001 LPF11830KH
D001 HSM123
TU001 FM/MW/LW Tuner Unit, MB4R9030
VT001 7TL
FM ANT 1
AM ANT 2
GND (RF) 3
L/D 4
FM +B (8.3V) 5
AM +B (8.3V) 6
Vcc (COM 8.3V) 7
SEEK REQ. 8
AI DET. 9
SD 10
S-METER 11
FM Demod. OUT 12
RDS OUT 13
AM D /IF BW 14
AM IF OUT 15
AIM Slope/Divider 16
BW T.C. 17
GND (AF) 18
0V (REF) 19
0V (AFC) 20
Vcc (5V) 21
CE 22
CLOCK 23
DATA 24
Digital GND
LO/DX
Q001 N.U.
Q002 UN2215
RDS+B
Q010 XN1A311
RDS DEC.
IC005 SAA6588T
TUNER+B/PLL+B
Q813 2SA1036K
Q812 UN211H
Q814 XN1A311
Q870 2SD1760
Q871 2SD601A
Q875 N.U.
Q811 N.U.
Q810 2SD874A
ZD874 HZS6A3L
ZD804 HZS6A2L
SEEK REQ.
Q003 UN2211
Q004 N.U.
Q005 UN2212
D003 1SS363
Q011 N.U.
RDS (CONT)
IC001 TC7S66F
IC002 NJM2903M
Q009 XN1A311
AUTO SIGNAL LEVEL DETECTOR
BW CONT
DOOR LED
LD001 SML-010DT87
LD002 SML-010DT87
Q645 UN2211
SW601 SPVG23 (NOSE CLOSE DET)
SW602 SPVG13 (NOSE OPEN DET)
LIM-SW
MAIN u-COM
IC501 D78F4218AGC
XL502
XL501 12.288MHz
DTS
IC502 MB89680PF
XL503 7.3728MHz
IC503 M24C04-WMN6T
I2C-BUS IC
TUNER[1:7]
DTS[1:5]
I2C[1:2]
MAIN[1:24]
CHG-BUS[1:2]
A/B-DET[1:2]
MECH[1:10]
FRONT[1:8]
To Main P.W. Board (2/4)
To Main P.W. Board (3/4)
To Main P.W. Board (4/4)
NOSE ON +5
Q501 UN211L
Q502 UN2212
CB501 FFC, 52271-1590
CH501 ASSY, UNIZON CONN 52R
To Front P.W. Board (CH401)

NOTE: N.U. is Not Used Parts.

Schematic Diagram (2/6)

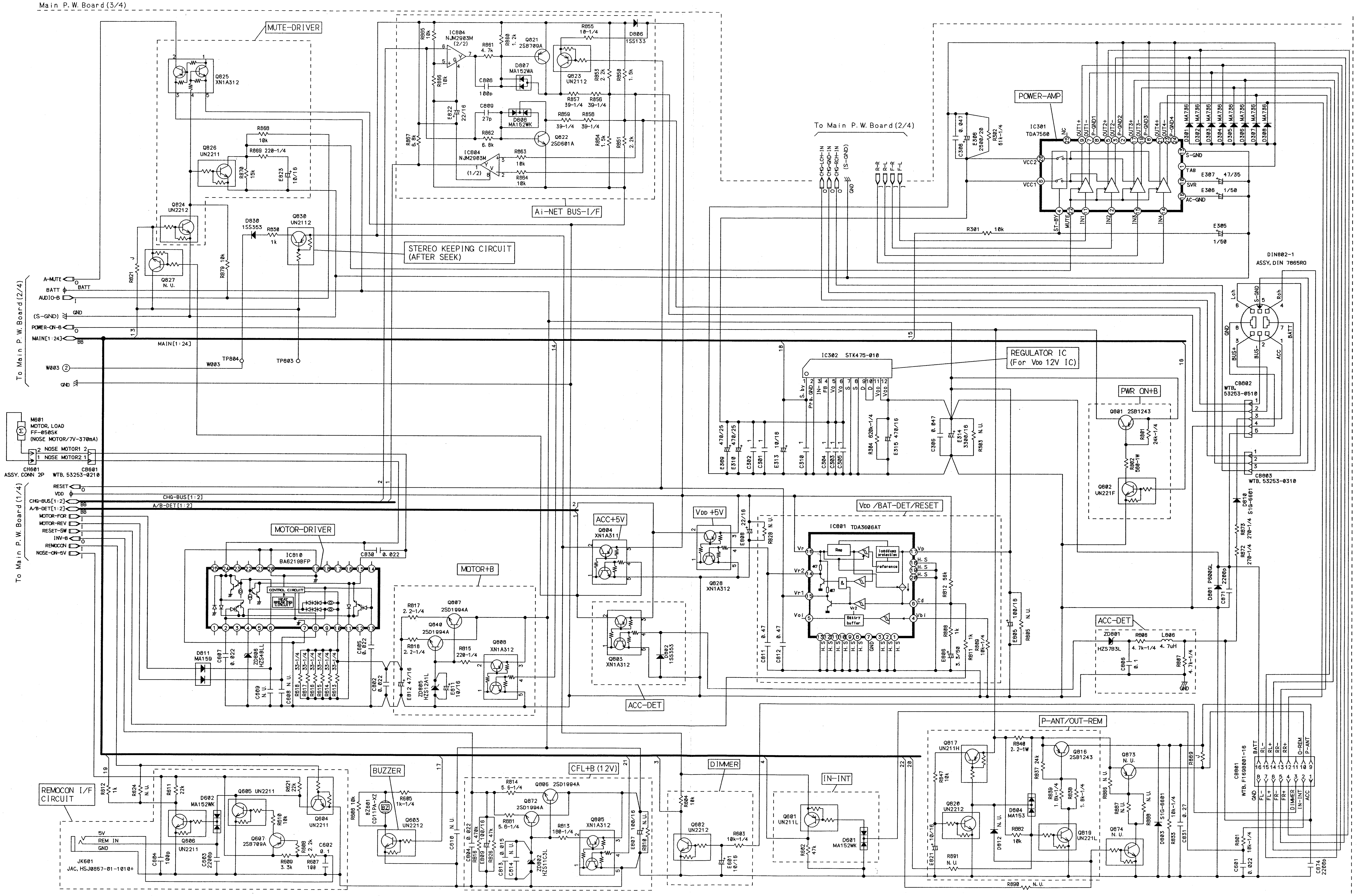
Main P. W. Board (2/4)


BBE
S/M BUFFER
SPE-ANA BUFFER
SPE-ANA CONTROL
SPE-ANA
Ai-NET IN/OUT CHANGE SW
SW332 SLD-42-508X Ai-NET·NORM/(EQ/DIV)
4V AMP
MUTE
E-VOL
AF CHECK MUTE
MONO SW
AUDIO+B
IF MUTE
STEREO HOLD CIRCUIT
IC203 NJM2150AV
IC204 NJM2904M
IC206 BA3834F
IC202 TDA7402
IC201 TC74HC4066AFT
IC254 TC7S66F
Q254 DTC114EUA
Q203 UN5212
Q202 UN2212
Q280 UN2212
Q201 XN1212
Q809 2SC3421
ZD803 HZS9C1L
IC310 BA4560F
IC311 BA4560F
IC312 BA4560F
Q321 XN0F256
Q322 N.U.
Q323 XN0F256
D321 MA152WA
D352 MA152WA
D203 1SS355
CB330 WTB,53253-0310
CB331 WTB,53253-0310
CB301 WTB,53253-0710
ET330 ASSY,WIRE RCA7865RO
DIN802-2 ET330-2
1 SUB.W/1-PRE_Rch
2 S-GND
3 SUB.W/1-PRE_Lch
5 OPEN
1 FRONT_Rch
2 S-GND
3 FRONT_Lch
(R-OUT/SUB.W)
(FRONT OUT)
1 +B
2 S-GND
3 -B
4 P.GND
5 P-CONT(14V)
6 BATT
7 E-GND
CHG-LCH-IN
CHG-GND-IN
CHG-RCH-IN
GND (S-GND)
To Main P. W. Board (3/4)
From DC/DC Converter P. W. Board (CB911)
R-L
F-L
R-R
F-R
A-MUTE
POWER-ON-B
MAIN[1:24]
BATT
AUDIO-B
W003
W002
To Main P. W. Board (1/4)
To Main P. W. Board (4/4)
MECH-LCH
MECH-RCH
BATT
AUDIO-B
SEEK-REQ
FM_B
LEVEL
AMIF
S/M
IF-MUTE
AF-LEVEL
AM-IN
FM-IN
NOSE-ON-5V
MAIN[1:24]
POWER-ON-B
GND
TP204
TP203
CHG-Lch
CHG-GND
CHG-Rch
R-OUT
L-OUT
CD-Lch
CD-Rch
AM-IN
FM-IN

NOTE: N. U. is Not Used Parts.

CDA-7865R Schematic Diagram (3/6)

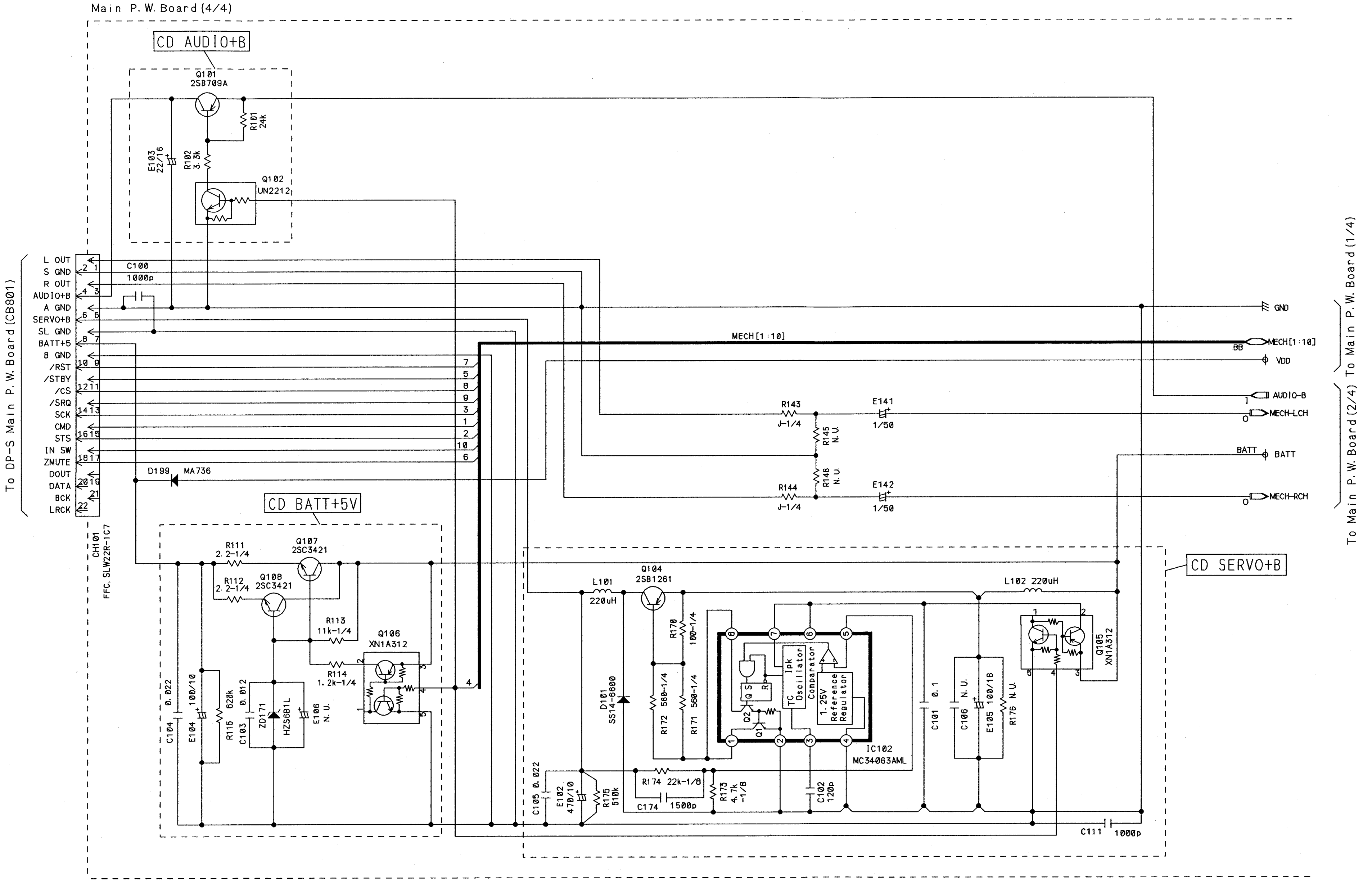
Main P.W. Board (3/4)


MUTE-DRIVER
Ai-NET BUS-I/F
STEREO KEEPING CIRCUIT (AFTER SEEK)
POWER-AMP
IC301 TDA7560
To Main P.W. Board (2/4)
CHG-LCH-IN
CHG-GND-IN
CHG-RCH-IN
(S-GND)
GND
R-R
R-L
F-R
F-L
REGULATOR IC (For VDD 12V IC)
IC302 STK475-010
PWR ON+B
DIN802-1 ASSY, DIN 7865RQ
CB802 WTB, 53253-0510
CB803 WTB, 53253-0310
A-MUTE
BATT
AUDIO-B
(S-GND)
POWER-ON-B
MAIN[1:24]
W003
GND
TP804
TP803
To Main P.W. Board (2/4)
M601 MOTOR, LOAD FF-050SK (NOSE MOTOR/7V-370mA)
NOSE MOTOR1
NOSE MOTOR2
CH601 ASSY, CONN 2P
CB601 WTB, 53253-0210
RESET
VDD
CHG-BUS[1:2]
A/B-DET[1:2]
MOTOR-FOR
MOTOR-REV
RESET-SW
INV-B
REMOCON
NOSE-ON-5V
To Main P.W. Board (1/4)
MOTOR-DRIVER
IC810 BA6219BFP
MOTOR+B
ACC+5V
VDD +5V
ACC-DET
VDD /BAT-DET/RESET
IC801 TDA3606AT
ACC-DET
P-ANT/OUT-REM
CB801 WTB, F1680801-16
BATT
RL-
RL+
RR-
RR+
O-REM
P-ANT
GND
FL-
FL+
FR-
FR+
DIMMER
IN-INT
ACC
REMOCON I/F CIRCUIT
JK601 JAC, HSJ0857-01-1010+
BUZZER
CFL+B (12V)
DIMMER
IN-INT

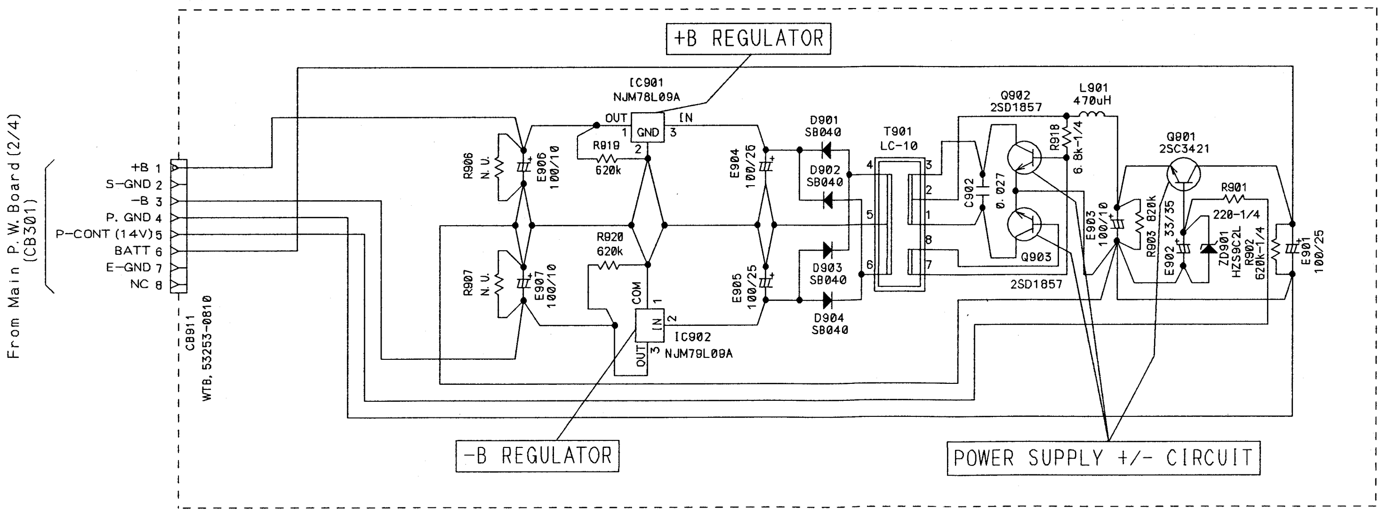
NOTE: N.U. is Not Used Parts.

Schematic Diagram (4/6)

Main P.W. Board (4/4)


CD AUDIO+B
Q101
2SB709A
R101
24k
E103
22/16
R102
3.3k
Q102
UN2212
To DP-S Main P.W. Board (CB801)
L OUT
S GND
R OUT
AUDIO+B
A GND
SERVO+B
SL GND
BATT+5
B GND
/RST
/STBY
/CS
/SRQ
SCK
CMD
STS
IN SW
ZMUTE
DOUT
DATA
BCK
LRCK
CH101
FFC, SLW22R-1C7
C100
1000p
D199 MA736
MECH[1:10]
R143
J-1/4
R145
N.U.
R146
N.U.
R144
J-1/4
E141
1/50
E142
1/50
GND
BB
MECH[1:10]
VDD
AUDIO-B
MECH-LCH
BATT
BATT
MECH-RCH
To Main P.W. Board (1/4)
To Main P.W. Board (2/4)
CD BATT+5V
R111
2.2-1/4
Q107
2SC3421
R112
2.2-1/4
Q108
2SC3421
R113
11k-1/4
Q106
XN1A312
R114
1.2k-1/4
C104 0.022
E104 100/10
R115 620k
C103 0.012
ZD171 HZS6B1L
E106 N.U.
CD SERVO+B
L101
220uH
Q104
2SB1261
R170 100-1/4
D101
SS14-6600
R172 560-1/4
R171 560-1/4
Ipk
TC
Oscillator
Comparator
1.25V
Reference
Regulator
Q S R
Q2
Q1
IC102
MC34063AML
L102 220uH
C101 0.1
C106 N.U.
E105 100/16
R176 N.U.
Q105
XN1A312
C105 0.022
E102
470/10
R175
510k
R174 22k-1/8
C174 1500p
R173
4.7k
-1/8
C102
120p
C111 1000p

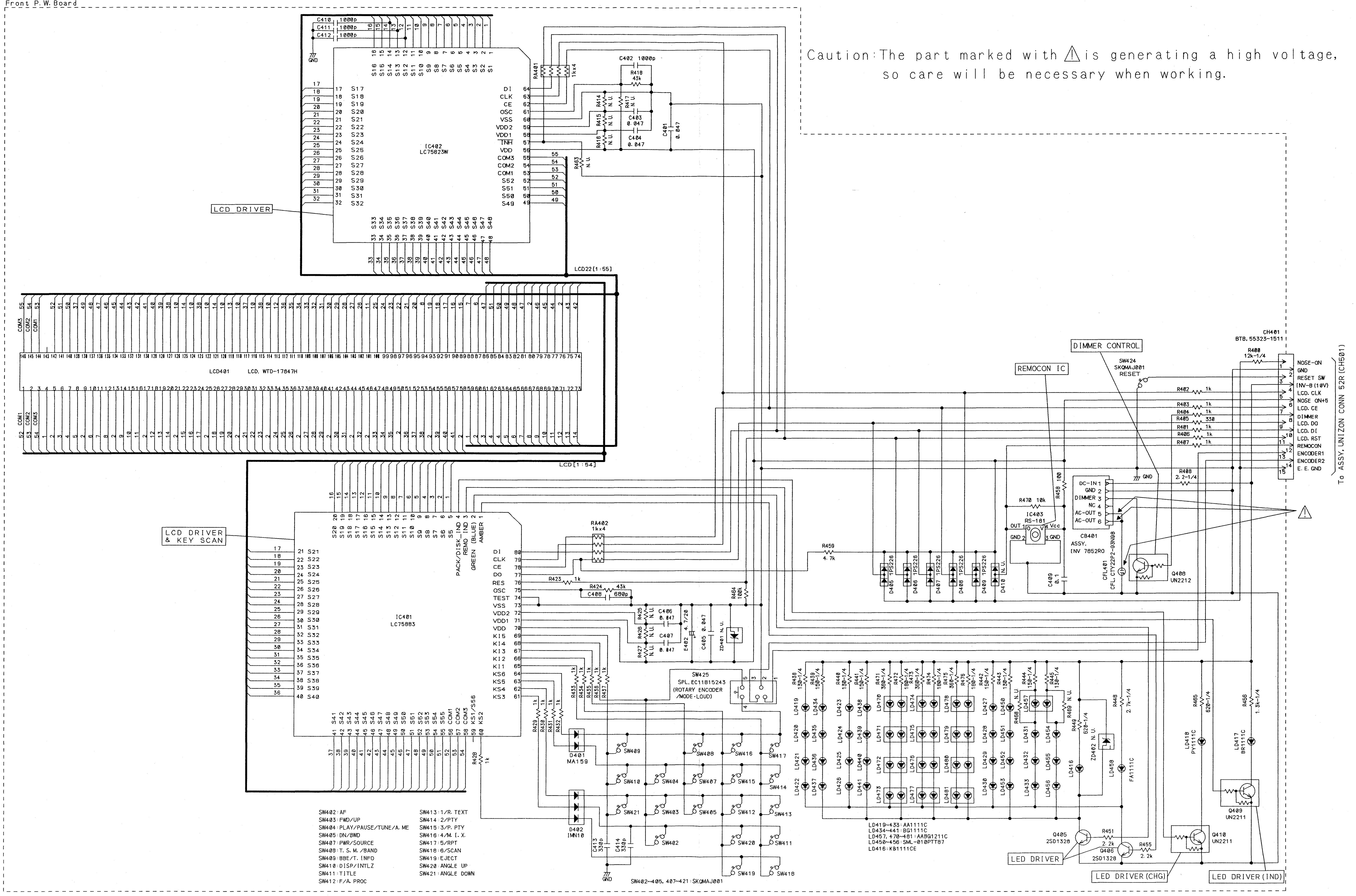
DC/DC Converter P.W. Board


From Main P.W. Board (2/4)
(CB301)
+B 1
S-GND 2
-B 3
P. GND 4
P-CONT (14V) 5
BATT 6
E-GND 7
NC 8
CB911
WTB, 53253-0810
+B REGULATOR
IC901
NJM78L09A
OUT
GND
IN
R919
620k
R906
N.U.
E906
100/10
R907
N.U.
E907
100/10
R920
620k
COM
IN
OUT
IC902
NJM79L09A
E904
100/25
E905
100/25
D901
SB040
D902
SB040
D903
SB040
D904
SB040
T901
LC-10
Q902
2SD1857
C902
0.027
Q903
2SD1857
L901
470uH
R918
6.8k-1/4
E903
100/10
R903 820k
Q901
2SC3421
R901
220-1/4
E902 33/35
ZD901
HZS9C2L
R902
620k-1/4
E901
100/25
-B REGULATOR
POWER SUPPLY +/- CIRCUIT

NOTE: N. U. is Not Used Parts.

CDA-7865R Schematic Diagram (5/6)

Front P.W. Board

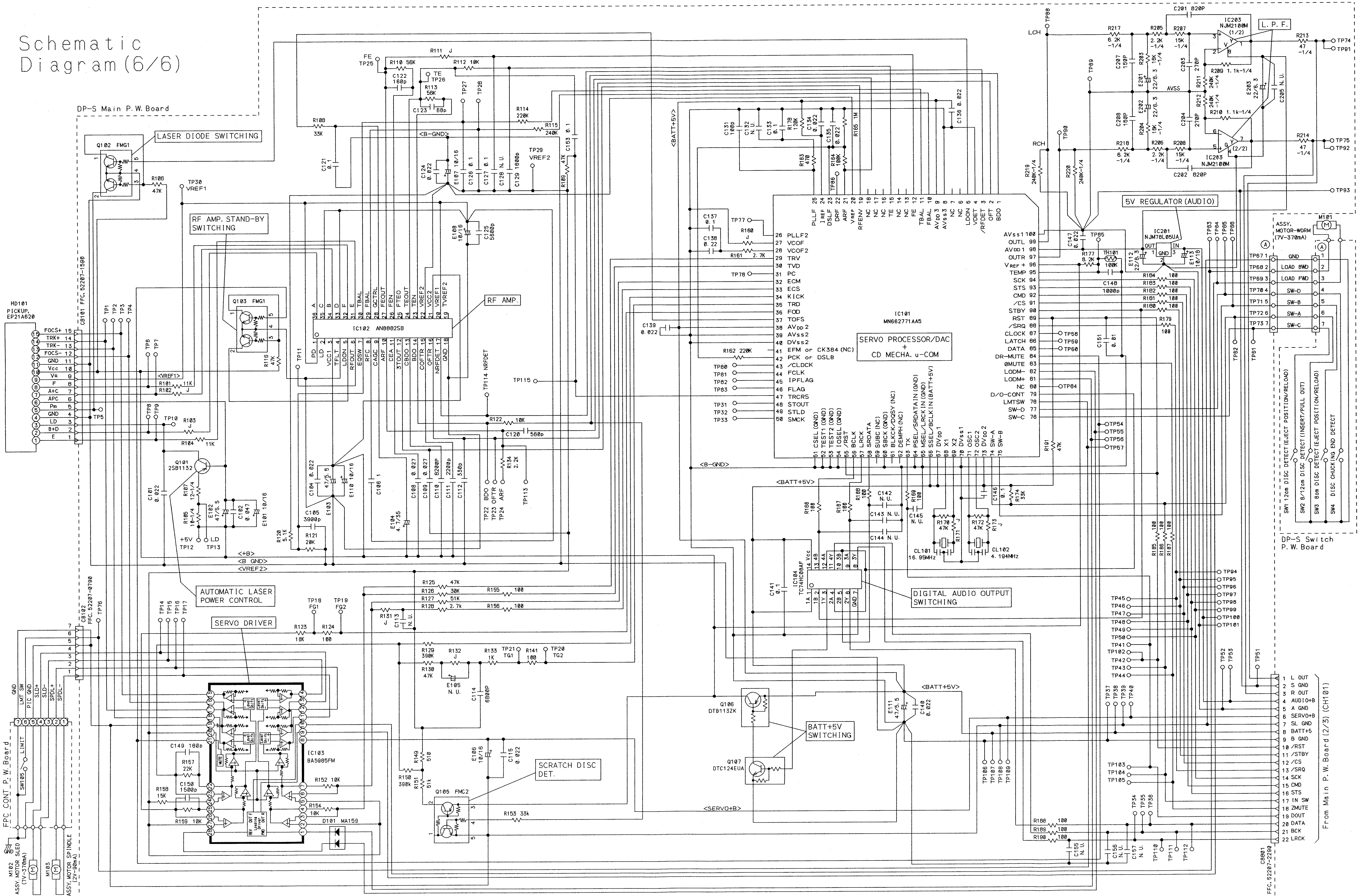


Caution: The part marked with ⚠ is generating a high voltage, so care will be necessary when working.

C410 1000p
C411 1000p
C412 1000p
GND
LCD DRIVER
IC402
LC75823W
DI
CLK
CE
OSC
VSS
VDD2
VDD1
INH
VDD
COM3
COM2
COM1
RA401
1k×4
C402 1000p
R410 43k
R414 N.U.
R417 N.U.
R415 N.U.
R416 N.U.
C403 0.047
C404 0.047
C401 0.047
R463 N.U.
LCD22[1:55]
LCD401
LCD. WTD-17847H
COM1
COM2
COM3
LCD[1:54]
LCD DRIVER & KEY SCAN
IC401
LC75883
PACK/DISK_IND
REMO_IND
GREEN (BLUE)
AMBER
RES
TEST
KI5
KI4
KI3
KI2
KI1
KS6
KS5
KS4
KS3
KS1/S56
KS2
RA402
1k×4
R423 1k
R424 43k
C408 680p
R464 100k
R425 N.U.
R426 N.U.
R427 N.U.
C406 0.047
C407 0.047
E402 4.7/20
C405 0.047
ZD401 N.U.
SW425
SPL. EC11815243
(ROTARY ENCODER /MODE-LOUD)
R433 1k
R434 1k
R435 1k
R436 1k
R437 1k
R429 1k
R430 1k
R431 1k
R432 1k
R428 1k
D401
MA159
D402
IMN10
C413 330p
C414 330p
SW409
SW408
SW416
SW417
SW410
SW404
SW407
SW415
SW414
SW421
SW403
SW405
SW412
SW413
SW402
SW420
SW411
SW419
SW418
SW402~405, 407~421: SKQMAJ001
SW402: AF
SW403: FWD/UP
SW404: PLAY/PAUSE/TUNE/A. ME
SW405: DN/BWD
SW407: PWR/SOURCE
SW408: T. S. M. /BAND
SW409: BBE/T. INFO
SW410: DISP/INTLZ
SW411: TITLE
SW412: F/A. PROC
SW413: 1/R. TEXT
SW414: 2/PTY
SW415: 3/P. PTY
SW416: 4/M. I. X.
SW417: 5/RPT
SW418: 6/SCAN
SW419: EJECT
SW420: ANGLE UP
SW421: ANGLE DOWN
R459 4.7k
D405 1PS226
D406 1PS226
D407 1PS226
D408 1PS226
D409 1PS226
D410 N.U.
REMOCON IC
DIMMER CONTROL
SW424
SKQMAJ001
RESET
GND
R470 10k
R458 100
IC403
RS-181
OUT
Vcc
C409 0.1
CB401
ASSY.
INV 7852RO
DC-IN
DIMMER
NC
AC-OUT
CFL401
CFL. CTY22P2-93N98
Q408
UN2212
CH401
BTB. 55323-1511
R400 12k-1/4
R402 1k
R403 1k
R404 1k
R405 330
R401 1k
R406 1k
R407 1k
R408 2.2-1/4
NOSE-ON
GND
RESET SW
INV-B (10V)
LCD. CLK
NOSE ON+5
LCD. CE
DIMMER
LCD. DO
LCD. DI
LCD. RST
REMOCON
ENCODER1
ENCODER2
E. E. GND
To ASSY, UNIZON CONN 52R (CH501)
⚠
R438 130-1/4
R439 150-1/4
R440 130-1/4
R441 150-1/4
R471 360-1/4
R472 180-1/4
R473 360-1/4
R474 180-1/4
R475 360-1/4
R476 180-1/4
R442 150-1/4
R443 130-1/4
R444 150-1/4
R445 130-1/4
R446 N.U.
R468 N.U.
R469 N.U.
R449 620-1/4
R448 2.7k-1/4
ZD402 N.U.
LD458
FA1111C
LD416
LD418
PY1111C
LD417
BR1111C
R465 620-1/4
R456 1.5k-1/4
LD419~433: AA1111C
LD434~441: BG1111C
LD457, 470~481: AABG1211C
LD450~456: SML-010PTT87
LD416: KB1111CE
Q405
2SD1328
R451 2.2k
Q406
2SD1328
R455 2.2k
Q410
UN2211
Q409
UN2211
LED DRIVER
LED DRIVER (CHG)
LED DRIVER (IND)

NOTE: N. U. is Not Used Parts.

Schematic Diagram(6/6)


DP-S Main P.W.Board
LASER DIODE SWITCHING
Q102 FMG1
RF AMP. STAND-BY SWITCHING
Q103 FMG1
HD101 PICKUP, EP21A620
CB101 FFC,52207-1500
IC102 AN8802SB
RF AMP.
AUTOMATIC LASER POWER CONTROL
Q101 2SB1132
SERVO DRIVER
IC103 BA5985FM
CB102 FFC,52207-0700
FPC CONT P.W.Board
M102 ASSY,MOTOR SLED (7V-370mA)
M103 ASSY,MOTOR SPINDLE (2V-90mA)
SCRATCH DISC DET.
Q105 FMC2
D101 MA159
IC101 MN662771AA5
SERVO PROCESSOR/DAC + CD MECHA. u-COM
IC104 TC74HC08AF
DIGITAL AUDIO OUTPUT SWITCHING
BATT+5V SWITCHING
Q106 DTB113ZK
Q107 DTC124EUA
CL101 16.95MHz
CL102 4.194MHz
5V REGULATOR(AUDIO)
IC201 NJM78L05UA
IC203 NJM2100M
L.P.F.
LCH
RCH
M101 ASSY,MOTOR-WORM (7V-370mA)
DP-S Switch P.W.Board
SW1 12cm DISC DETECT(EJECT POSITION/RELOAD)
SW2 8/12cm DISC DETECT(INSERT/PULL OUT)
SW3 8cm DISC DETECT(EJECT POSITION/RELOAD)
SW4 DISC CHUCKING END DETECT
CB001 FFC,52207-2200
From Main P.W.Board (2/3) (CH101)
1 L OUT
2 S GND
3 R OUT
4 AUDIO+B
5 A GND
6 SERVO+B
7 SL GND
8 BATT+5
9 B GND
10 /RST
11 /STBY
12 /CS
13 /SRQ
14 SCK
15 CMD
16 STS
17 IN SW
18 ZMUTE
19 DOUT
20 DATA
21 BCK
22 LRCK

NOTE:N.U. is Not Used Parts.

Terminal Voltage of IC/TR

IC001		
1	8.42V	
2	4.97V	
3	4.97V	
4	8.42V/0V	POWER ON/SEEK
5	0V	

IC002	
1	8.42V
2	5.0V
3	5.0V
4	0V
5	5.0V
6	5.0V
7	8.42V
8	8.45V

IC005			
1	0V	11	0V
2	0V	12	0V
3	0V	13	0V
4	PS	14	4.9V
5	PS	15	0V
6	0V	16	4.9V
7	4.9V	17	2.46V
8	PS	18	2.46V
9	PS	19	2.44V
10	PS	20	2.44V

IC102			
1	14.4V	5	0V
2	0V	6	14.4V
3	0V	7	14.4V
4	0V	8	14.4V

IC201					
1	4.44V	6	0V	11	4.44V
2	4.44V	7	0V	12	8.82V
3	4.45V	8	0V	13	8.82V
4	4.44V	9	4.44V	14	8.87V
5	0V	10	4.44V		

IC202									
1	4.40V	10	NC	19	0V	28	4.44V	37	4.44V
2	4.40V	11	4.40V	20	PS	29	4.44V	38	4.44V
3	4.40V	12	4.42V	21	PS	30	4.44V	39	4.44V
4	4.40V	13	4.40V	22	8.87V	31	4.43V	40	4.44V
5	4.40V	14	4.45V	23	NC	32	4.43V	41	NC
6	4.40V	15	0V	24	NC	33	4.43V	42	NC
7	NC	16	4.87V	25	4.44V	34	4.43V	43	NC
8	NC	17	NC	26	4.44V	35	4.43V	44	NC
9	NC	18	3.63V	27	4.44V	36	4.43V		

IC203				
1	4.38V		11	0V
2	4.40V		12	8.69V
3	4.40V		13	9.36V
4	4.40V		14	4.38V
5	4.40V		15	4.36V
6	4.38V		16	4.38V
7	4.41V		17	4.38V
8	0V		18	4.38V
9	4.66V/0V	BBE ON/OFF	19	4.38V
10	4.66V/0V	BBE ON/OFF	20	4.36V

IC204	
1	4.46V
2	4.46V
3	4.46V
4	0V
5	4.46V
6	4.46V
7	4.46V
8	8.75V

IC206			
1	2.48V	10	PS
2	1.51V	11	PS
3	0V	12	PS
4	NC	13	NC
5	NC	14	4.93V
6	NC	15	NC
7	2.49V	16	0V
8	2.49V	17	0V
9	4.93V	18	0V

IC254		
1	2.93V	
2	2.93V	
3	0V	
4	8.44V/0V	POWER ON/SEEK
5	8.44V	

IC301				
1	0V	14	6.82V	
2	0V	15	6.81V	
3	6.68V	16	6.86V	
4	4.98V	17	6.81V	
5	6.68V	18	0V	
6	14.10V	19	6.73V	
7	6.63V	20	14.10V	
8	0V	21	6.66V	
9	6.63V	22	0V/5.32V	MUTE ON/OFF
10	6.91V	23	6.65V	
11	6.82V	24	0V	
12	6.79V	25	NC	
13	0V			

IC302	
1	0V
2	0V
3	NC
4	14.10V
5	14.10V
6	14.10V
7	0V
8	0V
9	14.4V
10	14.4V
11	14.4V
12	14.4V

IC310	
1	0V
2	0V
3	NC
4	-8.94V
5	0V
6	0V
7	0V
8	8.98V

IC311	
1	0V
2	0V
3	NC
4	-8.94V
5	0V
6	0V
7	0V
8	8.98V

IC312	
1	0V
2	0V
3	NC
4	-8.94V
5	0V
6	0V
7	0V
8	8.98V

IC401								
1	4.54V	at AMBER LED ON	63	4.86V		73	0V	
2	4.54V	at BLUE LED ON	64	4.86V		74	0V	
3	4.78V	at REM IND ON	65	0V		75	PS	OSC
4	4.78V	at CHG IND ON	66	0V		76	4.86V	RES:at IND ON
5～55	PS	SEGMENT	67	0V		77	PS	DO
56～58	PS	COM	68	0V		78	PS	DI
59	NC		69	0V		79	PS	CL
60	4.86V		70	4.86V		80	PS	CE
61	4.86V		71	3.24V				
62	4.86V		72	1.65V				

IC402					
1～52	PS	SEGMENT	60	0	
53～55	PS	COM	61	PS	OSC
56	4.86		62	PS	CE
57	4.84	INH:at IND ON	63	PS	CL
58	3.24		64	PS	DI
59	1.65				

IC403		
1	PS	OUT
2	0	
3	0	
4	4.8	VCC

IC501							
1	NC	35	PS		69	5.05V	
2	NC	36	5.0V		70	0V	
3	NC	37	PS		71	0V/4.82V	MUTE ON/OFF
4	4.98V	38	PS		72	0V	
5	0V	39	PS		73	4.96V/0V	UNIZON ACTIVE/STOP
6	PS	40	PS		74	NC	
7	PS	41	PS		75	NC	
8	PS	42	PS		76	NC	
9	5.0V	43	0V/5V	MUTE ON/OFF	77	NC	
10	PS	44	PS		78	NC	
11	PS	45	PS		79	PS	
12	0V	46	PS		80	PS	
13	NC	47	PS		81	5.0V	
14	NC	48	PS		82	5.0V	
15	5.0V	49	NC		83	5.0V	
16	5.0V	50	NC		84	5.0V	
17	5.0V	51	0V/5V	DIMMER ON/OFF	85	5.0V	
18	NC	52	NC		86	5.0V	
19	PS	53	NC		87	PS	
20	PS	54	4.9V/0V	IN-INT ON/OFF	88	0V/5.0V	
21	5.23V	55	0V/4.96V	UNIZON CLOSE/OPEN	89	NC	
22	NC	56	4.97V/0V	UNIZON CLOSE/OPEN	90	5.0V	
23	5.0V	57	4.61V/0V	BW ON/OFF	91	PS	
24	5.0V	58	PS		92	NC	
25	0V	59	PS		93	NC	
26	2.5V	60	5V/0V	DOOR OPEN/CLOSE	94	0V	
27	0～5.0V	61	PS		95	NC	
28	PS	62	PS		96	NC	
29	4.89V	63	PS		97	NC	
30	0V	64	PS		98	NC	
31	0V	65	PS		99	NC	
32	5V	66	4.66V/0V	BBE ON/OFF	100	5V	
33	0V	67	0V				
34	PS	68	4.66V/0V	BBE ON/OFF			

IC502							
1	5.0V	34	0V/5V	MUTE ON/OFF	68	0V	
2	NC	35	0V		69	4.96V/0V	POWER ON/SEEK
3	0V	36	0V		70	NC	
4	0V	37	0V		71	0V/5V	POWER ON/IF MUTE
5	0V	38	0V		72	2.88V/0V	FM/AM
6	PS	39	NC		73	PS	
7	PS	40	NC		74	PS	
8	0V	41	NC		75	PS	
9	5V	42	NC		76	0V/4.69V	POWER ON/SEEK
10	NC	43	NC		77	NC	
11	NC	44	NC		78	0V/5V	POWER ON/SD
12	NC	45	PS		79	0V/4.89V	POWER ON/MOD. ON
13	NC	46	PS		80	5V	
14	NC	47	NC		81	NC	
15	NC	48	NC		82	5V/0V	LO/DX
16	NC	49	NC		83	NC	
17	NC	50	5V		84	0V	
18	NC	51	NC		85	0～5V	
19	NC	52	NC		86	0V	
20	NC	53	PS		87	0V	
21	NC	54	PS		88	0V	
22	NC	55	PS		89	0V	
23	0V	56	PS		90	0V	
24	NC	57	PS		91	0V	
25	NC	58	0V		92	0V	
26	NC	59	0V		93	5V	
27	NC	60	0V		94	5V	
28	NC	61	0V		95	NC	
29	NC	62	0V		96	NC	
30	NC	63	PS		97	5V	
31	NC	64	PS		98	NC	
32	NC	65	NC		99	PS	
33	NC	66	NC		100	NC	
		67	4.96V/0V	POWER ON/SEEK			

IC503	
1	0V
2	0V
3	0V
4	0V
5	PS
6	PS
7	0V
8	5.03V

IC801					
1	0V	8	0V	15	5.03V
2	0V	9	0V	16	5.03V
3	0V	10	0V	17	14.4V
4	0V	11	0V	18	0V
5	NC	12	0V	19	0V
6	2.72V	13	0V	20	0V
7	0V	14	4.07V		

IC804		
1	PS	connect CHG
2	PS	connect CHG
3	PS	connect CHG
4	0V	
5	2.45V	connect CHG
6	PS	connect CHG
7	PS	connect CHG
8	4.9V	

IC810					
1	NC	10	12.0V	19	0V
2	0V	11	0V	20	0V
3	NC	12	NC	21	0V
4	4.00V	13	12.0V	22	NC
5	NC	14	NC	23	NC
6	0V	15	4.93V	24	4.93V
7	0V	16	NC	25	NC
8	3.93V	17	NC		
9	NC	18	NC		

IC901	
1	9V
2	0V
3	13.5V

IC902	
1	0V
2	-13.5V
3	-9V

	1	2	3	4	5	MODE
Q009	NC	4.99V/0V	5.01V	4.61V/0V	0V	BW ON/OFF
Q010	NC	4.9V/0V	5.03V/0V	8.52V/0V	0V	POWER ON/OFF
Q105	NC	0V/14.4V	14.4V	0V/4.38V	0V	POWER ON/CD
Q106	NC	0V/14.4V	14.4V	0V/4.38V	0V	POWER ON/CD
Q201	0V/14.4V	14.4V/0V	0V/5.05V	0V	5.05V/0V	SUB ON/OFF
Q803	NC	4.98V	5.00V	5.97V	0V	
Q804	NC	4.96V	5.03V	4.98V	0V	
Q805	NC	14.3V/0V	14.4V	4.76V/0V	0V	POWER ON/OFF
Q808	NC	14.26V/0V	14.3V	4.96V/0V	0V	UNIZON ACTIVE/STOP
Q814	0V/8.52V	0V/8.51V	8.52V	2.88V/0V	0V	FM/AM
Q825	NC	14.33V/0V	14.4V	3.77V/0V	0V	MUTE ON/OFF
Q828	NC	5.00V	5.03V	4.07V	0V	

	1	2	3	4	5	6	MODE
Q321	0V	0V	0V	8.32V/0V	0V	8.32V/0V	MUTE ON/OFF
Q323	0V	0V	0V	8.32V/0V	0V	8.32V/0V	MUTE ON/OFF

	E	C	B	MODE
Q002	0V	8.45V	5.02V/0V	LOCAL/DX
Q003	0V	0V	0V/2.5V	POWER ON/SEEK
Q005	0V	0V	0V/1.96V	POWER ON/SEEK
Q101	8.89V	8.87V	8.18V	
Q102	0V	0V	4.38V	
Q104	14.3V	7.35V	13.97V	

	E	C	B	MODE
Q107	5.89V	14.4V	14.3V	
Q108	5.89V	14.4V	14.3V	
Q202	0V	3.7V	0V/2.2V	POWER ON/IF MUTE
Q203	0V	0V	0V/2.77V	POWER ON/SEEK
Q254	0V	8.44V/0V	0V/4.69V	POWER ON/SEEK
Q280	0V	PS	PS	
Q405	0.03V	0.09V	0.74V	at BLUE LED ON
Q406	0.03V	0.1V	0.73V	at AMBER LED ON
Q408	0.03V	7.35V	1.44V	at DIMMER ON
	0.04V	0.05V	4.39V	at DIMMER OFF
Q409	0.03V	0.08V	4.78V	at REM IND ON
Q410	0.03V	0.11V	4.78V	at CHG IND ON
Q501	5.03V	4.93V	0V	
Q502	0V	0V	4.82V	
Q601	5.1V/5.1V	5.09V/0V	3.29V/5.1V	IN-INT ON/OFF
Q602	0V/0V	0V/4.96V	9.89V/0V	ILLM(DIMMER)ON/OFF
Q603	0V/0V	PS/0V	PS/0V	BUZZER ON/OFF
Q604	0V	0V	1.89V	
Q605	0V	0V	0V	
Q606	0V	4.8V	0V	
Q607	5.05V	0V	5.04V	
Q645	0V	0V/7.85V	4.98V/0V	UNIZON OPEN/CLOSE
Q801	14.4V	14.4V	13.74V	
Q802	0V	0V	4.12V	
Q806	11.65V/0V	14.4V	12.3V/0V	POWER ON/OFF
Q807	0V/11.93V	14.4V	0V/14.26V	POWER ON/CD
Q809	8.75V/0V	14.4V	9.38V/0V	POWER ON/OFF
Q810	4.93V/0V	14.38V/0V	5.5V/0V	POWER ON/OFF
Q812	8.52V	8.45V/0V	0V/8.52V	FM/AM
Q813	8.52V	0V/8.48V	0V/7.8V	FM/AM
Q816	13.15V/14.18V	13.15V/0V	12.51V/14.14V	ANT,REM/500mA OVER
Q817	14.04V/14.18V	0.59V/14.17V	13.59V/13.44V	ANT,REM/500mA OVER
Q819	0V/0V	0.09V/14.17V	3.63V/0.62V	ANT,REM/500mA OVER
Q820	0V/0V	13.51V/0V	0.56V/9.72V	ANT,REM/500mA OVER
Q821	4.9V	1.99V	4.99V	connect CHG
Q822	0V	2.98V	0V	connect CHG
Q823	4.99V	1.99V	4.99V	connect CHG
Q824	0V	3.77V/0V	0V/4.82V	MUTE ON/OFF
Q826	0V	3.77V/0V	0V/5.19V	MUTE ON/OFF
Q830	4.96V	4.96V/2.55V	4.96V/0V	POWER ON/SEEK
Q840	0V/11.93V	14.4V	0V/14.26V	POWER ON/CD
Q870	8.53V/0V	14.38V/0V	9.13V/0V	POWER ON/OFF
Q871	0V	9.13V	8.53V	
Q872	11.65V/0V	14.4V	12.3V/0V	POWER ON/OFF
Q901	9.5V	10V	14.5	
Q902	0V	PS	PS	
Q903	0V	PS	PS	

[Measuring Conditions]

・Power Supply Voltage	: DC14.4V
・Measuring Meter	: Digital Multi Voltmeter
・Measuring Point Reference	: Between GND
・Measuring Condition	: Power ON, FM : 98.1MHz, No Modulation

(CD Deck Mechanism)

IC101

1	0.04V	23	2.6V	51~54	0.04V	80	NC
2	0.2V	24	1.25V	55	5.05V	81~83	0.05V
3	0.05V	25	1.77V	56~58	2.5V	84	4.93V
4	0.04V	26	NC	59	NC	85~87	NC
5	4.98V	27	0.04V	60	0.04V	88	5.05V
6, 7	NC	28	2.06V	61, 62	NC	89	5.03V
8	0.04V	29, 30	2.5V	63	0.05V	90	5V
9	5.03V	31	NC	64, 65	0.04V	91	0.02V
10, 11	—	32~36	2.5V	66, 67	5.05V	92, 93	5.03V
12	2.5V	37	2.2V	68, 69	OSC	94	4.96V
13, 14	NC	38	5.03V	70	0.04V	95	*
15	2.5V	39, 40	0.04V	71, 72	OSC	96	4.96V
16~18	NC	41	NC	73	5.05V	97	2.51V
19	0.02V	42	2.83V	74	5.01V	98	5.02V
20	2.5V	43~46	NC	75~77	0.03V	99	2.51V
21	0.02V	47	0.04V	78	5.02V	100	0.03V
22	NC	48~50	NC	79	0.05V		

NOTE : * : Changing Voltage by Temperature

IC102

1	2.51V	11	3.01V	21	4.96V
2	4.7V	12	2.5V	22, 23	2.48V
3	4.95V	13	3.1V	24	2.49V
4	0.04V	14	0.05V	25	NC
5	2.47V	15	3.04V	26, 27	2.49V
6	2.84V	16	0.2V	28	2.38V
7	2.02V	17	0.05V	29, 30	—
8	2.83V	18	0.04V	31~35	2.53V
9	1.41V	19	NC	36	2.69V
10	1.73V	20	2.51V		

IC103

1	0.07V	17	3.21V
2~7	2.5V	18	3.24V
8	6.93V	19	0.04V
9, 10	0.06V	20	2.52V
11	2.93V	21	4.96V
12	3.62V	22, 23	2.51V
13	6.27V	24	2.49V
14	3.29V	25	2.46V
15	3.14V	26, 27	2.5V
16	3.37V	28	0.07V

IC104

1	5.04V
2	5V
3	5.03V
4, 5	0.05V
6~8	0.04V
9	2.53V
10	0.05V
11	0.04V
12	0.05V
13	2.5V
14	5.04V

IC201

1	5.03V
2	0.02V
3	8.01V

IC203

1	2.53V
2, 3	2.5V
4	0.02V
5~7	2.5V
8	5.02V

	E	C	B
Q101	4.36V	2.55V	3.69V
Q106	0.08V	0.12V	5.05V
Q107	0.12V	5.06V	4.99V

	1	2	3	4	5
Q102	0.09V	2.54V	6.09V	0.08V	5.01V
Q103	0.08V	2.51V	0.08V	0.08V	4.96V
Q105	5.03V	2.51V	5.03V	0.08V	0.07V

[Measuring Conditions]

- Power Supply Voltage : DC14.4V
- Measuring Meter : Digital Multi Voltmeter
- Measuring Point Reference : Between GND
- Measuring Condition : at playing Disc

Description of IC Terminal

D78F4218AGC : IC501

No.	Symbol	I/O	Terminal Description
1	NC	—	No connect terminal.
≀			
3			
4	CD-STBY	O	Stand-by signal output terminal to CD Mecha μ-com.
5	0 MUTE-DET	I	Zero mute signal input terminal from CD.
6	CD-LSI RST	O	Reset signal output terminal to CD Mecha μ-com.
7	CD-CS	O	Chip select signal output terminal to CD Mecha μ-com.
8	CD-SRQ	I	Communication REQ signal input terminal from CD Mecha μ-com.
9	V_{DD}	—	Power supply connect terminal.
10	X2	—	System clock OSC connct terminal. (12.288MHz)
11	X1		
12	V_{SS}	—	GND connect terminal.
13	XT2 (NC)	—	No connect terminal.
14	XT1 (NC)		
15	$\overline{\text{RESET}}$	I	Reset signal input terminal.
16	BAT-DET	I	BATT detect signal input terminal.
17	ACC-DET	I	ACC detect signal input terminal.
18	NC	—	No connect terminal.
19	BUS-IN	I	Ai-NET BUS data signal input terminal.
20	BUS-OUT	O	Ai-NET BUS data signal output terminal.
21	IN-SW	I	Disc insert detect SW signal input terminal.
22	NC	—	No connect terminal.
23	AV_{DD}	—	Power supply terminal of A/D converter.
24	AVref0	—	Reference voltage input terminal of A/D converter.
25	GND	—	GND connect terminal.
26	NOSE-ON	I	Nose ON / OFF detect signal input terminal.
27	FM/AM SM	I	FM / AM Signal Meter signal input terminal.
28	3834 A/D	I	SPE-ANA data signal input terminal.
29	T-SENS	I	Temperature detect signal input terminal of power AMP.
30	GND	—	GND connect terminal.
31			
32	AREA	I	Area set up signal input terminal.
33	AV_{SS}	—	GND connect terminal of A/D converter.
34	3834 SHIFT	O	SPE-ANA level switching signal output terminal.
35	DTS CE	O	Chip enable signal output terminal to DTS μ-com.
36	AVref1	—	Reference voltage input terminal of A/D converter.
37	DTS STS	I	System status signal input terminal from DTS μ-com.
38	DTS CMD	O	Serial data signal output terminal to DTS μ-com.

No.	Symbol	I/O	Terminal Description
39	DTS CLK	O	Serial clock signal output terminal to DTS μ-com.
40	CD-STS	I	Status signal input terminal from CD Mecha μ-com.
41	CD-CMD	O	Command signal output terminal to CD Mecha μ-com.
42	CD-SCK	O	Clock signal output terminal to CD Mecha μ-com.
43	DTS MUTE	I	MUTE signal input terminal from DTS μ-com.
44	LCD-RST	O	Reset signal output terminal to LCD Driver.
45	LCD-DO	I	Serial data signal input terminal from LCD Driver.
46	LCD-DI	O	Serial data signal output terminal to LCD Driver.
47	LCD-CLK	O	Serial clock signal output terminal to LCD Driver.
48	LCD-CE	O	Chip enable signal output terminal to LCD Driver.
49	NC	—	No connect terminal.
50			
51	$\overline{\text{IN DIMMER}}$	I	DIMMER control signal input terminal.
52	NC	—	No connect terminal.
53			
54	IN-INT	I	IN-INTERRUPT input terminal.
55	$\overline{\text{LIMIT SW 2}}$	I	Active Nose position detect signal input terminal.
56	$\overline{\text{LIMIT SW 1}}$		
57	BW	O	FM band width switching control signal output terminal.
58	MOTOR REV	O	Nose Motor control signal output terminal.
59	MOTOR FOR		
60	DOOR LED	O	LED signal output terminal for lighting of CD Loading Slot.
61	3834 A	O	Select signal output terminal to SPE-ANA IC.
62	3834 B		
63	3834 C		
64	EV-DATA	O	Serial data signal output terminal to E-VOL.
65	EV-CLK	O	Serial clock signal output terminal to E-VOL.
66	BBE-1	O	BBE control output terminal. (BBE)
67	BBE-2	O	BBE control output terminal. (PROCESS)
68	BBE-3	O	BBE control output terminal. (LO CONT)
69	LPF1	O	LPF control signal output terminal.
70	LPF2		
71	$\overline{\text{MUTE}}$	O	Audio mute signal output terminal.
72	V_{SS}	—	GND connect terminal.
73	MOTOR-CONT	O	Nose Motor power control signal output terminal.
74	NC	—	No connect terminal.
~			
78			

No.	Symbol	I/O	Terminal Description
79	ENCODER1	I	Encoder data signal input terminal.
80	ENCODER2		
81	V_{DD}	—	Power supply connect terminal.
82	POWER IC-ON	O	Stand-by control signal output terminal for power IC.
83	NOSE-PWR	O	LCD Driver power control signal output terminal.
84	CFL ON	O	LCD backlight power control output terminal.
85	PWR-CONT	O	Power control signal output terminal for audio and key lighting.
86	60W-CONT	O	60W AMP control signal output terminal.
87	DIMMER-CONT	O	DIMMER control signal (PWM) output terminal.
88	BUZZER	O	Guide tone buzzer signal output terminal.
89	NC	—	No connect terminal.
90	V-CONT	O	CD power control signal output terminal.
91	REMOCON	I	Remocon data input terminal.
92	NC	—	No connect terminal.
93			
94	V_{PP} (GND)	—	GND connect terminal.
95	NC	—	No connect terminal.
≀			
99			
100	$\overline{\text{Auto Adj}}$	I	Auto adjustment control signal input terminal.

MB89689PF : IC502

No.	Symbol	I/O	Terminal Description
1	V_{CC}	—	+5V connect terminal.
2	NC	—	No connect terminal.
3	X0A (GND)	—	GND connect terminal.
4	MOD0 (GND)		
5	MOD1 (GND)		
6	X0	O	Crystal connect terminal. (8MHz)
7	X1	I	
8	V_{SS}	—	GND connect terminal.
9	$\overline{\text{RESET}}$	I	Reset input terminal. (L : RESET)
10	NC	—	No connect terminal.
≀			
22			
23	$\overline{\text{AM ST}}$ (PULL-DOWN)	—	Pull-down connect terminal.

No.	Symbol	I/O	Terminal Description
24	NC	—	No connect terminal.
~			
28			
29	AM $\overline{\text{ST}}$/MO (NC)		
30	$\overline{\text{FM DIVER}}$ (NC)		
31	NC		
~			
33			
34	$\overline{\text{T-MUTE}}$	O	Tuner Mute output terminal. (L : MUTE ON)
35	NC (GND)	—	GND connect terminal.
~			
38			
39	NC	—	No connect terminal.
~			
44			
45	R_XD (PULL-UP)	I	RDS Monitor input terminal. (Pull-up connect)
46	T_XD	O	RDS Monitor output terminal.
47	NC	—	No connect terminal.
~			
49			
50	V_{CC}	—	V_{CC} connect terminal.
51	NC	—	No connect terminal.
52			
53	TUNER CLK	I	Clock input terminal from Main µ-com.
54	TUNER SI	I	Serial input terminal from Main µ-com.
55	TUNER SO	O	Serial output terminal to Main µ-com.
56	RDS SDA	I/O	RDS I2C data input / output terminal.
57	RDS CLK	O	RDS I2C CLK output terminal.
58	NC (GND)	—	GND connect terminal.
59	V_{SS}		
60	NC (GND)		
~			
62			
63	E2P SDA	I/O	E2P-ROM data input / output terminal.
64	E2P CLK	O	E2P-ROM CLK output terminal.
65	Divider (NC)	—	No connect terminal.
66	Narrow (NC)		
67	$\overline{\text{SEEK Req.}}$	O	Seek speed control (Tuner) terminal. (L : Seeking)
68	NC (GND)	—	GND connect terminal.
69	$\overline{\text{AF HOLD}}$	O	AF HOLD output terminal. (L : at tuner set up HOLD)

No.	Symbol	I/O	Terminal Description
70	AF HOLD (NC)	—	No connect terminal.
71	IF MUTE	O	IF Mute control terminal. (H : Mute ON)
72	FM / $\overline{\text{AM}}$	O	FM / AM switching terminal. (H : FM)
73	PLL CLK	O	PLL clock output terminal.
74	PLL DATA	I/O	PLL data input / output terminal.
75	PLL CE	O	PLL CE output terminal.
76	SEEK Req.	O	Seek speed control (Tuner) terminal. (H : Seeking)
77	RDS RESET (NC)	—	No connect terminal.
78	SD	I	SD (Tuner) input terminal. (H : Station ON)
79	$\overline{\text{PSWN}}$	I	Audio signal level detect terminal from RDS Decoder. (L : No Station)
80	$\overline{\text{Auto Adj.}}$	I	Auto adjustment terminal. (L : Auto adjustment start)
81	TUNER ON (NC)	—	No connect terminal.
82	LO / $\overline{\text{DX}}$	O	Local / DX Seek (Tuner) switching terminal. (H : Local Seek)
83	NC	—	No connect terminal.
84	AV$_{SS}$	—	GND connect terminal.
85	S / M	I	Field strength (A / D, Tuner) input terminal.
86	M / P	I	Multipath rejection (A / D) input terminal.
87	NC (GND)	—	GND connect terminal.
≀			
92			
93	AV$_{CC}$	—	V$_{CC}$ connect terminal.
94	AVR		
95	NC	—	No connect terminal.
96			
97	TUNER STBY	I	Stand-by input terminal from Main μ-com.
98	NC	—	No connect terminal.
99	DAVN	I	RDS data available input terminal.
100	NC	—	No connect terminal.

MN662771AA5 : IC101 (DP23S070)

No.	Symbol	I/O	Terminal Description
1	BDO	I	Drop-Out signal input terminal. H : Drop-Out
2	OFT	I	Off Track signal input terminal. H : Off Track
3	/RFDET	I	RF detect signal input terminal. L : detection
4	VDET	I	Vibration detect signal input terminal. H : detection
5	LDON	O	Laser ON signal output terminal. H : ON
6	NC	—	No connect terminal.
7			

No.	Symbol	I/O	Terminal Description
8	$AV_{SS}3$	—	GND connect terminal for analog circuit.
9	$AV_{DD}3$	—	Power supply terminal for analog circuit.
10	FBAL	O	Focus Balance adjustment output terminal.
11	TBAL	O	Tracking Balance adjustment output terminal.
12	FE	I	Focus Error signal input terminal. (Analog input)
13	NC	—	No connect terminal.
14			
15	TE	I	Tracking Error signal input terminal. (Analog input)
16	NC	—	No connect terminal.
~			
18			
19	RFENV	I	RF Envelope signal input terminal. (Analog input)
20	V_{REF}	I	V_{REF} input terminal.
21	ARF	I	RF signal input terminal. (for DSL)
22	DRF	I	Bias terminal for DSL.
23	DSLF	I/O	Roop Filter terminal for DSL.
24	I_{REF}	I	Reference current input terminal.
25	PLLF	I/O	Roop Filter terminal for PLL.
26	PLLF2	I/O	Characteristic Roop Filter switching terminal for PLL.
27	VCOF	I/O	Roop Filter terminal for VCO.
28	VCOF2	I/O	Digital Servo Processor (33.8688MHz) / Roop Filter terminal for VCO.
29	TRV	O	Traverse compulsion sending output terminal.
30	TVD	O	Traverse drive output terminal.
31	PC	O	Spindle motor ON output terminal.
32	ECM	O	Spindle motor driving signal terminal. (compulsion mode output) 3-State
33	ECS	O	Spindle motor driving signal terminal. (Servo Error signal output)
34	KICK	O	Kick Pulse output terminal. 3-State
35	TRD	O	Tracking Drive output terminal.
36	FOD	O	Focus Drive Output terminal.
37	TOFS	O	Tracking Offset adjustment output terminal.
38	$AV_{DD}2$	—	Power supply terminal for analog circuit (DSL, PLL, AD and DA block).
39	$AV_{SS}2$	—	GND connect terminal for analog circuit (DSL, PLL, AD and DA block).
40	$DV_{SS}2$	—	GND connect terminal for Digital circuit.
41	EFM or CK384 (NC)	—	No connect terminal.
42	PCK or DSLB	O	PLL Sampling Clock output terminal. (f_{PCK}=4.3218MHz) at default : PLL Samplig Clock output / at fulfillment Command : DSL Balance output
43	/CLDCK	O	Sub Code Frame Clock signal output terminal. (f_{CLDCK}=7.35KHz)
44	FCLK	O	Crystal Frame Clock signal output terminal. (f_{FCLK}=7.35KHz)
45	IPFLAG	O	Interpolation Flag signal output terminal. H : Interpolation
46	FLAG	O	Flag signal output terminal.

No.	Symbol	I/O	Terminal Description
47	TRCRS	I	Track Cross signal input terminal.
48	STOUT	O	Serial Data output terminal for monitor signal. (SENCE, NFLOCK, NTLOCK... etc.)
49	STLD	O	Load signal output terminal for monitor signal.
50	SMCK	O	Bit Clock signal output terminal for monitor signal. (f_{SMCK} = 4.2336MHz)
51	CSEL (GND)	—	GND connect terminal.
52	TEST1 (GND)		
53	TEST2 (GND)		
54	IOSEL (GND)		
55	/RST	I	Reset input terminal from CD Signal Processor LSI block. (L : Reset)
56	BCLK	O	Bit Clock output terminal for SRDATA.
57	LRCK	O	L / R discrimination signal output terminal.
58	SRDATA	O	Serial Data output terminal.
59	SUBC (NC)	—	No connect terminal.
60	SBCK (GND)	—	GND connect terminal.
61	BLKCK / DQSY (NC)	—	No connect terminal.
62	DEMPH (NC)		
63	TX	O	Digital Audio Interface signal output terminal.
64	PSEL / SRDATAIN (GND)	—	GND connect terminal.
65	MSEL / LRCKIN (GND)		
66	SSEL / BCLKIN (BATT+5V)	—	BATT+5V connect terminal.
67	DV$_{DD}$1	—	Power supply terminal for Digital circuit.
68	X1	I	Main Clock input terminal. (f=16.9344MHz)
69	X2	O	Main Clock output terminal. (f=16.9344MHz)
70	DV$_{SS}$1	—	GND connect terminal for Digital circuit.
71	OSC1	I	Clock Input terminal for μ-COM. (4.19MHz)
72	OSC2	O	Clock output terminal for μ-COM.
73	DV$_{DD}$2	—	Power supply terminal for Digital circuit.
74	SW-A	I	Mecha. control SW input terminal. (L : SW ON)
75	SW-B		
76	SW-C		
77	SW-D		
78	LMTSW	I	Pick-Up inner detect SW input terminal. (L : detection)
79	D / O-CONT	O	Digital Audio Data control output terminal. (H : D / O ON)
80	NC	—	No connect terminal.
81	LODM+	O	Loading motor control terminal.
82	LODM-		
83	0 MUTE	O	0 Data signal output terminal.
84	DR-MUTE	O	Servo Driver MUTE signal output terminal. (L : DR MUTE ON)

No.	Symbol	I/O	Terminal Description
85	DATA	O	DATA output terminal for Error monitor.
86	LATCH	O	LATCH output terminal for Error monitor.
87	CLOCK	O	CLOCK output terminal for Error monitor.
88	/SRQ	O	Status Request signal output terminal.
89	RST	I	µ-COM block reset terminal.
90	STBY	I	STBY signal input terminal.
91	/CS	I	Communication start / stop signal terminal.
92	CMD	I	Command input terminal.
93	STS	O	Status output terminal.
94	SCK	I	Clock input terminal for communication.
95	TEMP	I	A/D input terminal for temperature detect.
96	$V_{REF}+$	—	Power supply terminal for A/D converter.
97	OUTR	O	Rch Audio Output terminal.
98	$AV_{DD}1$	—	Power supply terminal for analog circuit. (for Audio output block(for using both as Lch and Rch))
99	OUTL	O	Lch Audio Output terminal.
100	$AV_{SS}1$	—	GND connect terminal for analog circuit. (for Audio output block(for using both as Lch and Rch))

Electrical Parts List

Capacitor : μF=microfarads,pF=picofarads

Abbreviations

RES.= Resistor
C.F.= Carbon Film
M.F.= Metal Film
M.O.= Metal OxideFilm
M.P.= Metal Plate
TR. = Transistor
TRANS.= Transformer
CP. = Chip
CAP.= Capacitor
ELY.= Electrolytic
CER.= Ceramic
MYL.= Mylar
TAN.= Tantalum
POLY.= Polystyrol
PP. = Polypropylene
PLT.= Polyethylene
PF. = Polyester Film

Symbol No.	Part No.	Description
Main P.W.Board		
IC's		
IC001	51T15731W10	TC7S66F-TE85L -CP
IC002	51T93332F01	IC,NJM2903M-TE3 -SE2
IC005	51T15132Y02	SAA6588T -SE9
IC102	51T15510W01	IC ,MC34063AML -SPD
IC201	51T15456Y01	TC74HC4066AFT-EL-SE5
IC202	51T35457Y01	TDA7402 -QT
IC203	51T15468Y02	NJM2150AV-TE1 -SE2
IC204	51T93333F01	NJM2904M-TE3 -SE2
IC206	51T95048W01	BA3834F -SE9
IC254	51T15731W10	TC7S66F-TE85L -CP
IC301	51T35403Y01	TDA7560 -ZS
IC302	51T15426Y02	STK475-010 -IB
IC310	51T15420Y01	BA4560F-E2 -SE2
IC311	51T15420Y01	BA4560F-E2 -SE2
IC312	51T15420Y01	BA4560F-E2 -SE2
IC501	51T35568Y13	MTP,D78F4218AGC
IC502	51T15161Y02	IC,MB89689PF-G110-QT
IC503	51T25160Y01	M24C04-WMN6T -SE2
IC801	51T95193W01	TDA3606AT -SE9
IC804	51T93332F01	IC,NJM2903M-TE3 -SE2
IC810	51T25448Y01	BA6219BFP-Y-E2 -SE9
Transistors		
Q002	48T64222F05	TR ,UN2215 10 -TX
Q003	48T64222F01	TR ,UN2211 10-10 -TX
Q005	48T64222F02	TR ,UN2212 22-22 -TX
Q009	48T45594W16	TR,XN1A311-TX -CP
Q010	48T45594W16	TR,XN1A311-TX -CP
Q101	48T52437F05	TR ,2SB709A-S /TX-CP
Q102	48T64222F02	TR ,UN2212 22-22 -TX
Q104	48T15511W02	CP.2SB1261-TE2 -E5
Q105	48T45594W12	TR ,XN1A312 -TX-CP
Q106	48T45594W12	TR ,XN1A312 -TX-CP
Q107	48T69176F02	TR ,2SC3421-Y
Q108	48T69176F02	TR ,2SC3421-Y
Q201	48T45594W08	TR ,XN1212 -TX-CP
Q202	48T64222F02	TR ,UN2212 22-22 -TX
Q203	48T45251W03	TR ,UN5212 22-22 -CP
Q254	48T94606F06	TR,DTC114EUA-T106-CP
Q280	48T64222F02	TR ,UN2212 22-22 -TX
Q321	48T25317Y01	TR,XN0F256-TX -CP
Q323	48T25317Y01	TR,XN0F256-TX -CP
Q501	48T64221F11	TR,UN211L-TX -CP
Q502	48T64222F02	TR ,UN2212 22-22 -TX
Q601	48T64221F11	TR,UN211L-TX -CP
Q602	48T64222F02	TR ,UN2212 22-22 -TX
Q603	48T64222F02	TR ,UN2212 22-22 -TX
Q604	48T64222F01	TR ,UN2211 10-10 -TX
Q605	48T64222F01	TR ,UN2211 10-10 -TX
Q606	48T64222F01	TR ,UN2211 10-10 -TX
Q607	48T52437F05	TR ,2SB709A-S /TX-CP
Q645	48T64222F01	TR ,UN2211 10-10 -TX
Q801	48T84366F03	TR,2SB1243-Q-TV2 -RD
Q802	48T64222F11	TR,UN221F-TX -CP
Q803	48T45594W12	TR ,XN1A312 -TX-CP
Q804	48T45594W16	TR,XN1A311-TX -CP
Q805	48T45594W12	TR ,XN1A312 -TX-CP
Q806	48T93828F04	TR,2SD1994A-S-TA -RD
Q807	48T93828F04	TR,2SD1994A-S-TA -RD
Q808	48T45594W12	TR ,XN1A312 -TX-CP
Q809	48T69176F02	TR ,2SC3421-Y
Q810	48T73023F01	TR ,2SD874A -E2
Q812	48T64221F13	TR,UN211H-TX -CP
Q813	48T63419F04	TR,CP.2SA1036K-HR-96
Q814	48T45594W16	TR,XN1A311-TX -CP
Q816	48T84366F03	TR,2SB1243-Q-TV2 -RD
Q817	48T64221F13	TR,UN211H-TX -CP
Q819	48T64222F12	TR,UN221L-TX -CP
Q820	48T64222F02	TR ,UN2212 22-22 -TX
Q821	48T52437F05	TR ,2SB709A-S /TX-CP
Q822	48T52438F04	TR ,2SD601A-S /TX-CP
Q823	48T64221F02	TR ,UN2112 22-22 -TX
Q824	48T64222F02	TR ,UN2212 22-22 -TX
Q825	48T45594W12	TR ,XN1A312 -TX-CP
Q826	48T64222F01	TR ,UN2211 10-10 -TX
Q828	48T45594W12	TR ,XN1A312 -TX-CP
Q830	48T64221F02	TR ,UN2112 22-22 -TX
Q840	48T93828F04	TR,2SD1994A-S-TA -RD
Q870	48T92368F04	TR,2SD1760 R -E5

Symbol No.	Part No.	Description
Q871	48T52438F04	TR ,2SD601A-S /TX-CP
Q872	48T93828F04	TR,2SD1994A-S-TA -RD

Diodes

Symbol No.	Part No.	Description
D001	48T15437Y01	DIO,HSM123-TL -CP
D003	48T75404W01	DIO,1SS353-TE17 -CP
D101	48T65122W01	DIO,SHT SS14-6600-E1
D199	48T95572W01	DIO,SHT MA736-TX -E1
D203	48T75404W01	DIO,1SS353-TE17 -CP
D301	48T95572W01	DIO,SHT MA736-TX -E1
D302	48T95572W01	DIO,SHT MA736-TX -E1
D303	48T95572W01	DIO,SHT MA736-TX -E1
D304	48T95572W01	DIO,SHT MA736-TX -E1
D305	48T95572W01	DIO,SHT MA736-TX -E1
D306	48T95572W01	DIO,SHT MA736-TX -E1
D307	48T95572W01	DIO,SHT MA736-TX -E1
D308	48T95572W01	DIO,SHT MA736-TX -E1
D321	48T25651W01	DIO,CP MA152WA
D352	48T25651W01	DIO,CP MA152WA
D501	48T75404W01	DIO,1SS353-TE17 -CP
D502	48T75404W01	DIO,1SS353-TE17 -CP
D601	48T25651W02	DIO,MA152WK-TX -CP
D602	48T25651W02	DIO,MA152WK-TX -CP
D801	48T25609Y02	DIO,P600GL -
D802	48T75404W01	DIO,1SS353-TE17 -CP
D803	48T25593Y01	DIO,S1G-6601 -E1
D804	48T94335F01	DIO,MA153-CP
D806	48T68828F11	DIO,1SS133 -RH
D807	48T25651W01	DIO,CP MA152WA
D808	48T25651W02	DIO,MA152WK-TX -CP
D810	48T25593Y01	DIO,S1G-6601 -E1
D811	48T81063F01	DIO,CP.MA159 / TX-CP
D830	48T75404W01	DIO,1SS353-TE17 -CP
ZD171	48T25766W04	DIO,ZEN.HZS 6B1L -R5
ZD801	48T25766W15	DIO,ZEN.HZS 7B3L -R5
ZD802	48T25766W35	DIO,ZEN.HZS11C3L -R5
ZD803	48T25766W24	DIO,ZEN.HZS 9C1L -R5
ZD804	48T25766W02	DIO,ZEN.HZS 6A2L -R5
ZD805	48T25766W36	DIO,ZEN.HZS12A1L -R5
ZD806	48T25801W08	DIO,ZEN.HZS 4BLL -R5
ZD874	48T25766W03	DIO,ZEN.HZS 6A3L -R5

Coils

Symbol No.	Part No.	Description
L001	24T65172W17	IND,LEM4532 4R7K -E2
L002	24T16403W29	COI,IND.15R-M -CP
L010	24T16403W15	COI,IND.1R0-M K -CP
L011	24T16403W15	COI,IND.1R0-M K -CP
L012	24T16403W07	COI,IND.R22-M K -CP
L013	24T16403W15	COI,IND.1R0-M K -CP
L101	24T15313Y17	IND,CDRH104 221M -E6
L102	24T16271W13	COIL,RCR875D-221K
L501	24T16403W15	COI,IND.1R0-M K -CP
L806	24T16403W23	COI,IND.4R7-M -CP
VT001	24T15267Y01	COIL,7TL -DB

Crystals

Symbol No.	Part No.	Description
XL001	91T85169W18	XTL,HC-49 4.332M -R5
XL501	91T95084W02	XTL,CS20 12.288M -E9
XL503	91T85169W44	XTL,HC-49 7.3728M-R5

LED's

Symbol No.	Part No.	Description
LD601	48T65477W05	LED,SML-010DTT87 -CP(ORG)
LD602	48T65477W05	LED,SML-010DTT87 -CP(ORG)

Buzzer

Symbol No.	Part No.	Description
BZ601	50T85541W01	BUZZER,CD11PA-XZ -H5

Filter

Symbol No.	Part No.	Description
CF001	91T75257W02	LPF,LPF11830KH-3C-DB

Surge Protector

Symbol No.	Part No.	Description
SA001	48T81048F02	PTT,DSP-201M -RD

Switch

Symbol No.	Part No.	Description
SW332	40T45282W02	SW,SLIDE SLD-42-508X (Ai-NET・NORM/(EQ/DIV))

Thermistor

Symbol No.	Part No.	Description
TH501	48T25250Y01	TMT,ERTJ1VV104J -CP

Symbol No.	Part No.	Description
Capacitors		
C001	08T15399W01	CAP,CER.223K-B1H -CP
C002	08T15399W01	CAP,CER.223K-B1H -CP
C003	08T15399W01	CAP,CER.223K-B1H -CP
C005	08S60102F46	CAP,CER 684K-B1E -CP
C008	08S65128F67	CAP,CER.682K-B1H -CP
C009	08S82122F53	CAP,CER.471J-CH1H-CP
C012	08S60102F40	CAP,CER 224K-B1E -CP
C016	08S65128F61	CAP,CER.222K-B1H -CP
C018	08S45677W48	CAP,CER.331J-CH1H-CP
C019	08S45677W36	CAP,CER.101J-CH1H-CP
C020	08S65128F69	CAP,CER.103K-B1H -CP
C025	08S82122F23	CAP,CER.27RJ-CH1H-CP
C026	08S82122F24	CAP,CER.30RJ-CH1H-CP
C028	08S65128F61	CAP,CER.222K-B1H -CP
C030	08S45677W54	CAP,CER 561J-CH1H-CP
C100	08S82122F61	CAP,CER.102J-CH1H-CP
C101	08S35374W01	CAP,CER 104K-B1E-CP
C102	08S82122F39	CAP,CER.121J-CH1H-CP
C103	08S65128F70	CAP,CER.123K-B1H -CP
C104	08T15399W01	CAP,CER.223K-B1H -CP
C105	08T15399W01	CAP,CER.223K-B1H -CP
C111	08S82122F61	CAP,CER.102J-CH1H-CP
C174	08S82122F65	CAP,CER.152J-CH1H-CP
C201	08T15349Y01	CAP,CER 105K-B1A -CP
C204	08S65128F70	CAP,CER.123K-B1H -CP
C206	08S35374W01	CAP,CER 104K-B1E-CP
C207	08S82122F37	CAP,CER.101J-CH1H-CP
C209	08S82122F61	CAP,CER.102J-CH1H-CP
C210	08S35374W01	CAP,CER 104K-B1E-CP
C211	08T15399W03	CAP,CER.473K-B1H -CP
C212	08S35374W01	CAP,CER 104K-B1E-CP
C220	08T15349Y01	CAP,CER 105K-B1A -CP
C231	08S45676W67	CAP,CER.332K-B1H -CP
C232	08S45676W67	CAP,CER.332K-B1H -CP
C233	08S45676W82	CAP,CER 333K-B1C -CP
C234	08S45676W82	CAP,CER 333K-B1C -CP
C280	08S45676W80	CAP,CER 223K-B1E -CP
C281	08S45676W80	CAP,CER 223K-B1E -CP
C282	08T15399W01	CAP,CER.223K-B1H -CP
C283	08T15399W01	CAP,CER.223K-B1H -CP
C284	08T15349Y01	CAP,CER 105K-B1A -CP
C285	08T15399W01	CAP,CER.223K-B1H -CP
C301	08S60102F48	CAP,CER 105K-B1E -CP
C302	08S60102F48	CAP,CER 105K-B1E -CP
C303	08S60102F48	CAP,CER 105K-B1E -CP
C304	08S60102F48	CAP,CER 105K-B1E -CP
C305	08S60102F48	CAP,CER 105K-B1E -CP
C306	08T15399W03	CAP,CER.473K-B1H -CP
C308	08T15399W03	CAP,CER.473K-B1H -CP
C310	08S60102F48	CAP,CER 105K-B1E -CP
C311	08S45677W29	CAP,CER 51RJ-CH1H-CP
C312	08S45677W29	CAP,CER 51RJ-CH1H-CP
C331	08T25628Y01	CAP,TF 334M-1C -CP
C332	08T25628Y01	CAP,TF 334M-1C -CP
C333	08T25628Y01	CAP,TF 334M-1C -CP
C334	08T25628Y01	CAP,TF 334M-1C -CP
C341	08S45677W29	CAP,CER 51RJ-CH1H-CP
C342	08S45677W29	CAP,CER 51RJ-CH1H-CP
C343	08S45677W29	CAP,CER 51RJ-CH1H-CP
C344	08S45677W29	CAP,CER 51RJ-CH1H-CP
C501	08S82122F17	CAP,CER.15RJ-CH1H-CP
C502	08S82122F15	CAP,CER.12RJ-CH1H-CP
C503	08T15399W01	CAP,CER.223K-B1H -CP
C504	08S82122F19	CAP,CER.18RJ-CH1H-CP
C505	08S82122F17	CAP,CER.15RJ-CH1H-CP
C506	08T15399W01	CAP,CER.223K-B1H -CP
C507	08S65128F69	CAP,CER.103K-B1H -CP
C508	08T15399W01	CAP,CER.223K-B1H -CP
C601	08T15399W01	CAP,CER.223K-B1H -CP
C602	08S35374W01	CAP,CER 104K-B1E-CP
C603	08S65128F61	CAP,CER.222K-B1H -CP
C604	08S45677W36	CAP,CER.101J-CH1H-CP
C605	08T15399W01	CAP,CER.223K-B1H -CP
C607	08T15399W01	CAP,CER.223K-B1H -CP
C802	08T15399W01	CAP,CER.223K-B1H -CP
C804	08S45676W80	CAP,CER 223K-B1E -CP
C805	08T15399W01	CAP,CER.223K-B1H -CP
C806	08S35374W01	CAP,CER 104K-B1E-CP
C808	08S45677W36	CAP,CER.101J-CH1H-CP
C809	08S45677W22	CAP,CER.27RJ-CH1H-CP
C811	08S60102F44	CAP,CER 474K-B1E -CP
C812	08S60102F44	CAP,CER 474K-B1E -CP
C813	08S65128F71	CAP,CER.153K-B1H -CP
C830	08T15399W01	CAP,CER.223K-B1H -CP
C831	08T55390W34	CAP,TF 274J-1H -R5
C870	08T15399W01	CAP,CER.223K-B1H -CP
C871	08T95466W01	CAP,CER 222K-B2J -CP
C874	08T95466W01	CAP,CER 222K-B2J -CP
E001	23T55521W16	CAP,AK .22R-1C -R2
E002	23T55521W16	CAP,AK .22R-1C -R2
E003	23T55521W16	CAP,AK .22R-1C -R2
E004	23S75373W13	CAP,ELY 1R0-1H -R2
E005	23S75372W04	CAP,ELY 10R-1C -R2
E006	23S75373W13	CAP,ELY 1R0-1H -R2
E007	23T55521W16	CAP,AK .22R-1C -R2
E008	23T55521W16	CAP,AK .22R-1C -R2

Symbol No.	Part No.	Description
E009	23S75372W04	CAP,ELY 10R-1C -R2
E010	23S75372W16	CAP,ELY 2R2-1H -R2
E102	23T55378W03	CAP,KMG 471-1A -R2
E103	23S75372W05	CAP,ELY 22R-1C -R2
E104	23S75372W02	CAP,ELY 101-1A -R2
E105	23T95564W12	CAP,FC 101-1C-E -E6
E141	23S75372W15	CAP,ELY 1R0-1H -R2
E142	23S75372W15	CAP,ELY 1R0-1H -R2
E201	23S75372W15	CAP,ELY 1R0-1H -R2
E202	23S75372W15	CAP,ELY 1R0-1H -R2
E203	23S75372W15	CAP,ELY 1R0-1H -R2
E204	23S75372W15	CAP,ELY 1R0-1H -R2
E207	23T55521W16	CAP,AK .22R-1C -R2
E208	23S75372W04	CAP,ELY 10R-1C -R2
E209	23S75372W17	CAP,ELY 3R3-1H -R2
E210	23S75372W17	CAP,ELY 3R3-1H -R2
E213	23S75372W04	CAP,ELY 10R-1C -R2
E214	23S75372W04	CAP,ELY 10R-1C -R2
E215	23S65134W64	CAP,ELY R47-1H(3)-E2
E216	23T55521W16	CAP,AK .22R-1C -R2
E231	23S75372W04	CAP,ELY 10R-1C -R2
E232	23S75372W05	CAP,ELY 22R-1C -R2
E234	23S75372W04	CAP,ELY 10R-1C -R2
E235	23S75372W04	CAP,ELY 10R-1C -R2
E240	23T55521W16	CAP,AK .22R-1C -R2
E280	23T55521W16	CAP,AK .22R-1C -R2
E305	23S75372W15	CAP,ELY 1R0-1H -R2
E306	23T95115W02	CAP,AD 1R0-1H -R2
E307	23T55378W06	CAP,KMG 47R-1V -R2
E308	23T75346W04	CAP,X-PRO 252-1D +
E309	23T25139Y03	CAP,PW 471-1E +
E310	23T25139Y03	CAP,PW 471-1E +
E311	23S75373W14	CAP,ELY 2R2-1H -R2
E312	23S75373W14	CAP,ELY 2R2-1H -R2
E313	23S75372W04	CAP,ELY 10R-1C -R2
E314	23T75346W03	CAP,X-PRO 332-1C +
E315	23T95564W41	CAP,FC 471-1C-G -EA
E318	23T55521W16	CAP,AK .22R-1C -R2
E319	23T55521W16	CAP,AK .22R-1C -R2
E321	23S75372W16	CAP,ELY 2R2-1H -R2
E322	23S75372W16	CAP,ELY 2R2-1H -R2
E341	23S75373W14	CAP,ELY 2R2-1H -R2
E342	23S75373W14	CAP,ELY 2R2-1H -R2
E343	23S75373W14	CAP,ELY 2R2-1H -R2
E344	23S75373W14	CAP,ELY 2R2-1H -R2
E348	23T55521W16	CAP,AK .22R-1C -R2
E349	23T55521W16	CAP,AK .22R-1C -R2
E353	23S75372W16	CAP,ELY 2R2-1H -R2
E354	23S75372W16	CAP,ELY 2R2-1H -R2

Symbol No.	Part No.	Description
E361	23T55521W16	CAP,AK .22R-1C -R2
E362	23T55521W16	CAP,AK .22R-1C -R2
E380	23T45365W05	CAP,SME 101-1E -R2
E381	23T45365W02	CAP,SME 101-1A -R2
E382	23T45365W02	CAP,SME 101-1A -R2
E501	23S75372W03	CAP,ELY 221-1A -H2
E502	23S75372W03	CAP,ELY 221-1A -H2
E503	23S75372W05	CAP,ELY 22R-1C -R2
E504	23S65134W32	CAP,ELY 22R-1C(5)-E3
E601	23T95564W08	CAP,FC 10R-1C-B -E2
E805	23S75373W06	CAP,ELY 101-1C -R2
E806	23S65134W72	CAP,ELY 3R3-1H(4)-E2
E807	23S75372W08	CAP,ELY 101-1C -H2
E808	23S75372W05	CAP,ELY 22R-1C -R2
E809	23S75372W08	CAP,ELY 101-1C -H2
E811	23S75372W04	CAP,ELY 10R-1C -R2
E812	23S75372W07	CAP,ELY 47R-1C -R2
E813	23T45365W05	CAP,SME 101-1E -R2
E814	23T45365W02	CAP,SME 101-1A -R2
E815	23T45365W06	CAP,SME 33R-1V -R2
E818	23S65134W31	CAP,ELY 10R-1C(4)-E2
E821	23S75372W04	CAP,ELY 10R-1C -R2
E822	23T55521W16	CAP,AK .22R-1C -R2
E823	23S65134W31	CAP,ELY 10R-1C(4)-E2
E870	23T45365W03	CAP,SME 221-1A -R2
E871	23T45365W03	CAP,SME 221-1A -R2

Resistors

Symbol No.	Part No.	Description
L502	06T75432W50	RES,RK JUMPER1/10-CP
R001	06T75433W01	RES,RK 10RJ 1/4 -CP
R003	06T75431W57	RES,RK 821J 1/10 -CP
R010	06T75431W97	RES,RK 393J 1/10 -CP
R011	06T25277Y87	RES,RK 183J 1/16 -CP
R012	06T75432W40	RES,RK 225J 1/10 -CP
R014	06T75431W99	RES,RK 473J 1/10 -CP
R015	06T75431W99	RES,RK 473J 1/10 -CP
R016	06T25277Y57	RES,RK 102J 1/16 -CP
R017	06T25277Y57	RES,RK 102J 1/16 -CP
R018	06T25279Y04	RES,RK JUMPER1/16-CP
R019	06T75431W83	RES,RK 103J 1/10 -CP
R022	06T75431W91	RES,RK 223J 1/10 -CP
R025	06T75431W77	RES,RK 562J 1/10 -CP
R026	06T25277Y81	RES,RK 103J 1/16 -CP
R027	06T25277Y93	RES,RK 333J 1/16 -CP
R029	06T75431W93	RES,RK 273J 1/10 -CP
R030	06T75434W26	RES,RK JUMPER 1/4-CP
R031	06T75434W26	RES,RK JUMPER 1/4-CP

Symbol No.	Part No.	Description
R032	06T75432W50	RES,RK JUMPER1/10-CP
R033	06T75432W50	RES,RK JUMPER1/10-CP
R034	06T25277Y57	RES,RK 102J 1/16 -CP
R035	06T75432W50	RES,RK JUMPER1/10-CP
R036	06T25277Y43	RES,RK 271J 1/16 -CP
R037	06T25277Y43	RES,RK 271J 1/16 -CP
R038	06T25277Y57	RES,RK 102J 1/16 -CP
R040	06T75431W67	RES,RK 222J 1/10 -CP
R041	06T25278Y22	RES,RK 474J 1/16 -CP
R042	06T75431W59	RES,RK 102J 1/10 -CP
R101	06T75431W92	RES,RK 243J 1/10 -CP
R102	06T75431W71	RES,RK 332J 1/10 -CP
R111	06T75434W22	RES,RK 2R2J 1/4 -CP
R112	06T75434W22	RES,RK 2R2J 1/4 -CP
R113	06T75433W74	RES,RK 113J 1/4 -CP
R114	06T75433W51	RES,RK 122J 1/4 -CP
R115	06T75432W27	RES,RK 624J 1/10 -CP
R143	06T75434W26	RES,RK JUMPER 1/4-CP
R144	06T75434W26	RES,RK JUMPER 1/4-CP
R170	06T75433W25	RES,RK 101J 1/4 -CP
R171	06T75433W43	RES,RK 561J 1/4 -CP
R172	06T75433W43	RES,RK 561J 1/4 -CP
R173	06S35084Y33	RES,RK 472F 1/8 -CP
R174	06S35084Y41	RES,RK 223F 1/8 -CP
R175	06T75432W25	RES,RK 514J 1/10 -CP
R201	06T75431W92	RES,RK 243J 1/10 -CP
R202	06T25277Y57	RES,RK 102J 1/16 -CP
R203	06T75431W97	RES,RK 393J 1/10 -CP
R204	06T75432W08	RES,RK 104J 1/10 -CP
R206	06T75432W24	RES,RK 474J 1/10 -CP
R207	06T25277Y57	RES,RK 102J 1/16 -CP
R208	06T25277Y57	RES,RK 102J 1/16 -CP
R209	06T75431W99	RES,RK 473J 1/10 -CP
R210	06T75431W99	RES,RK 473J 1/10 -CP
R215	06T75431W79	RES,RK 682J 1/10 -CP
R220	06T25277Y81	RES,RK 103J 1/16 -CP
R222	06T75431W60	RES,RK 112J 1/10 -CP
R223	06T25277Y58	RES,RK 112J 1/16 -CP
R224	06T25277Y58	RES,RK 112J 1/16 -CP
R225	06T75431W60	RES,RK 112J 1/10 -CP
R231	06T75431W90	RES,RK 203J 1/10 -CP
R232	06T75431W90	RES,RK 203J 1/10 -CP
R233	06T75431W90	RES,RK 203J 1/10 -CP
R234	06T75431W90	RES,RK 203J 1/10 -CP
R235	06T75431W83	RES,RK 103J 1/10 -CP
R236	06T75431W83	RES,RK 103J 1/10 -CP
R237	06T75431W83	RES,RK 103J 1/10 -CP
R256	06T25277Y89	RES,RK 223J 1/16 -CP
R257	06T75431W99	RES,RK 473J 1/10 -CP

Symbol No.	Part No.	Description
R280	06T75431W59	RES,RK 102J 1/10 -CP
R281	06T25278Y11	RES,RK 164J 1/16 -CP
R282	06T75432W18	RES,RK 274J 1/10 -CP
R284	06T75432W50	RES,RK JUMPER1/10-CP
R301	06T75431W83	RES,RK 103J 1/10 -CP
R302	06T75433W90	RES,RK 513J 1/4 -CP
R304	06T75434W17	RES,RK 624J 1/4 -CP
R311	06T25278Y06	RES,RK 104J 1/16 -CP
R312	06T25278Y06	RES,RK 104J 1/16 -CP
R313	06T25277Y80	RES RK 912J 1/16 -CP
R314	06T25277Y80	RES RK 912J 1/16 -CP
R315	06T25277Y85	RES,RK 153J 1/16 -CP
R316	06T25277Y85	RES,RK 153J 1/16 -CP
R321	06T25277Y96	RES,RK 433J 1/16 -CP
R322	06T25277Y96	RES,RK 433J 1/16 -CP
R323	06T75431W43	RES,RK 221J 1/10 -CP
R324	06T75431W43	RES,RK 221J 1/10 -CP
R325	06T75431W35	RES,RK 101J 1/10 -CP
R326	06T75431W35	RES,RK 101J 1/10 -CP
R339	06T75432W17	RES,RK 244J 1/10 -CP
R340	06T75431W59	RES,RK 102J 1/10 -CP
R341	06T75432W08	RES,RK 104J 1/10 -CP
R342	06T75432W08	RES,RK 104J 1/10 -CP
R343	06T25277Y80	RES RK 912J 1/16 -CP
R344	06T25277Y80	RES RK 912J 1/16 -CP
R345	06T25277Y85	RES,RK 153J 1/16 -CP
R346	06T25277Y85	RES,RK 153J 1/16 -CP
R347	06T25277Y80	RES RK 912J 1/16 -CP
R348	06T25277Y80	RES RK 912J 1/16 -CP
R349	06T25277Y85	RES,RK 153J 1/16 -CP
R350	06T25277Y85	RES,RK 153J 1/16 -CP
R361	06T75432W08	RES,RK 104J 1/10 -CP
R362	06T75432W08	RES,RK 104J 1/10 -CP
R363	06T25277Y96	RES,RK 433J 1/16 -CP
R364	06T25277Y96	RES,RK 433J 1/16 -CP
R365	06T75431W43	RES,RK 221J 1/10 -CP
R367	06T75431W35	RES,RK 101J 1/10 -CP
R368	06T75431W43	RES,RK 221J 1/10 -CP
R370	06T75431W35	RES,RK 101J 1/10 -CP
R380	06T75434W19	RES,RK 754J 1/4 -CP
R381	06T75432W25	RES,RK 514J 1/10 -CP
R382	06T75432W25	RES,RK 514J 1/10 -CP
R385	06T25277Y41	RES,RK 221J 1/16 -CP
R386	06T25277Y41	RES,RK 221J 1/16 -CP
R389	06T25277Y41	RES,RK 221J 1/16 -CP
R390	06T25277Y41	RES,RK 221J 1/16 -CP
R500	06T75431W59	RES,RK 102J 1/10 -CP
R501	06T75431W59	RES,RK 102J 1/10 -CP
R502	06T75431W59	RES,RK 102J 1/10 -CP

Symbol No.	Part No.	Description
R503	06T75431W59	RES,RK 102J 1/10 -CP
R504	06T75431W59	RES,RK 102J 1/10 -CP
R505	06T75431W59	RES,RK 102J 1/10 -CP
R506	06T75431W59	RES,RK 102J 1/10 -CP
R507	06T75431W59	RES,RK 102J 1/10 -CP
R509	06T75432W29	RES,RK 754J 1/10 -CP
R510	06S35084Y27	RES,RK 152F 1/8 -CP
R511	06T75431W59	RES,RK 102J 1/10 -CP
R512	06T25277Y57	RES,RK 102J 1/16 -CP
R513	06T25277Y81	RES,RK 103J 1/16 -CP
R514	06T25277Y57	RES,RK 102J 1/16 -CP
R515	06T75431W59	RES,RK 102J 1/10 -CP
R516	06T25277Y57	RES,RK 102J 1/16 -CP
R517	06T25277Y57	RES,RK 102J 1/16 -CP
R518	06T25277Y83	RES,RK 123J 1/16 -CP
R520	06T25278Y06	RES,RK 104J 1/16 -CP
R521	06T75432W50	RES,RK JUMPER1/10-CP
R522	06T75431W59	RES,RK 102J 1/10 -CP
R523	06T75431W59	RES,RK 102J 1/10 -CP
R524	06T75431W59	RES,RK 102J 1/10 -CP
R525	06T75434W14	RES,RK 474J 1/4 -CP
R526	06S15593Y55	RES,RK 182F 1/10 -CP
R529	06T75431W99	RES,RK 473J 1/10 -CP
R530	06T25277Y97	RES,RK 473J 1/16 -CP
R531	06T75432W50	RES,RK JUMPER1/10-CP
R532	06T75432W50	RES,RK JUMPER1/10-CP
R533	06T75431W59	RES,RK 102J 1/10 -CP
R534	06T75431W59	RES,RK 102J 1/10 -CP
R535	06T75431W59	RES,RK 102J 1/10 -CP
R536	06T75431W83	RES,RK 103J 1/10 -CP
R537	06T75431W83	RES,RK 103J 1/10 -CP
R541	06T75431W59	RES,RK 102J 1/10 -CP
R542	06T75431W79	RES,RK 682J 1/10 -CP
R543	06T75431W83	RES,RK 103J 1/10 -CP
R544	06T75431W91	RES,RK 223J 1/10 -CP
R549	06T75431W59	RES,RK 102J 1/10 -CP
R550	06T75431W91	RES,RK 223J 1/10 -CP
R551	06T75431W75	RES,RK 472J 1/10 -CP
R552	06T25277Y57	RES,RK 102J 1/16 -CP
R553	06T75431W91	RES,RK 223J 1/10 -CP
R554	06T25277Y81	RES,RK 103J 1/16 -CP
R555	06T25277Y81	RES,RK 103J 1/16 -CP
R559	06T25277Y81	RES,RK 103J 1/16 -CP
R560	06T25277Y89	RES,RK 223J 1/16 -CP
R561	06T75433W33	RES,RK 221J 1/4 -CP
R562	06T75431W91	RES,RK 223J 1/10 -CP
R563	06T75431W91	RES,RK 223J 1/10 -CP
R571	06T75431W59	RES,RK 102J 1/10 -CP
R572	06T75431W59	RES,RK 102J 1/10 -CP

Symbol No.	Part No.	Description
R573	06T25277Y57	RES,RK 102J 1/16 -CP
R577	06T75431W75	RES,RK 472J 1/10 -CP
R580	06T75432W08	RES,RK 104J 1/10 -CP
R581	06T25277Y57	RES,RK 102J 1/16 -CP
R582	06T75431W59	RES,RK 102J 1/10 -CP
R590	06T25279Y04	RES,RK JUMPER1/16-CP
R591	06T25279Y04	RES,RK JUMPER1/16-CP
R592	06T75431W59	RES,RK 102J 1/10 -CP
R599	06T25277Y97	RES,RK 473J 1/16 -CP
R601	06T75433W73	RES,RK 103J 1/4 -CP
R602	06T75431W99	RES,RK 473J 1/10 -CP
R603	06T75433W73	RES,RK 103J 1/4 -CP
R604	06T25277Y81	RES,RK 103J 1/16 -CP
R605	06T75433W49	RES,RK 102J 1/4 -CP
R606	06T75431W83	RES,RK 103J 1/10 -CP
R607	06T75431W35	RES,RK 101J 1/10 -CP
R608	06T25277Y65	RES,RK 222J 1/16 -CP
R609	06T25277Y69	RES,RK 332J 1/16 -CP
R610	06T25277Y81	RES,RK 103J 1/16 -CP
R611	06T25277Y89	RES,RK 223J 1/16 -CP
R612	06T25277Y57	RES,RK 102J 1/16 -CP
R613	06T75433W13	RES,RK 33RJ 1/4 -CP
R614	06T75433W13	RES,RK 33RJ 1/4 -CP
R615	06T75433W13	RES,RK 33RJ 1/4 -CP
R616	06T75433W13	RES,RK 33RJ 1/4 -CP
R617	06T75433W13	RES,RK 33RJ 1/4 -CP
R618	06T75433W13	RES,RK 33RJ 1/4 -CP
R619	06T25277Y97	RES,RK 473J 1/16 -CP
R620	06T25277Y97	RES,RK 473J 1/16 -CP
R621	06T25277Y89	RES,RK 223J 1/16 -CP
R622	06T75431W91	RES,RK 223J 1/10 -CP
R623	06T75431W91	RES,RK 223J 1/10 -CP
R655	06T75433W37	RES,RK 331J 1/4 -CP
R801	06T75433W82	RES,RK 243J 1/4 -CP
R802	06T25590Y02	RES,RS 561J 1W -
R804	06T75432W20	RES,RK 334J 1/10 -CP
R806	06T75433W65	RES,RK 472J 1/4 -CP
R807	06T75433W65	RES,RK 472J 1/4 -CP
R808	06T25277Y57	RES,RK 102J 1/16 -CP
R809	06T75433W73	RES,RK 103J 1/4 -CP
R811	06T75431W59	RES,RK 102J 1/10 -CP
R812	06T25277Y99	RES,RK 563J 1/16 -CP
R813	06T75433W31	RES,RK 181J 1/4 -CP
R814	06T75434W23	RES,RK 5R6J 1/4 -CP
R815	06T75433W33	RES,RK 221J 1/4 -CP
R816	06T25278Y22	RES,RK 474J 1/16 -CP
R817	06T75434W22	RES,RK 2R2J 1/4 -CP
R818	06T75434W22	RES,RK 2R2J 1/4 -CP
R819	06T75433W47	RES,RK 821J 1/4 -CP

Symbol No.	Part No.	Description
R821	06T25279Y04	RES,RK JUMPER1/16-CP
R824	06T75433W54	RES,RK 162J 1/4 -CP
R826	06T75431W99	RES,RK 473J 1/10 -CP
R830	06T25277Y57	RES,RK 102J 1/16 -CP
R831	06T25277Y69	RES,RK 332J 1/16 -CP
R832	06T75433W49	RES,RK 102J 1/4 -CP
R833	06T75433W73	RES,RK 103J 1/4 -CP
R837	06T75431W92	RES,RK 243J 1/10 -CP
R838	06T75433W55	RES,RK 182J 1/4 -CP
R839	06T75433W55	RES,RK 182J 1/4 -CP
R840	06T25590Y03	RES,RS 2R2J 1W -
R847	06T75431W83	RES,RK 103J 1/10 -CP
R850	06T25277Y61	RES,RK 152J 1/16 -CP
R851	06T25277Y65	RES,RK 222J 1/16 -CP
R853	06T25277Y65	RES,RK 222J 1/16 -CP
R854	06T25277Y61	RES,RK 152J 1/16 -CP
R855	06T75433W01	RES,RK 10RJ 1/4 -CP
R856	06T75433W15	RES,RK 39RJ 1/4 -CP
R857	06T75433W15	RES,RK 39RJ 1/4 -CP
R858	06T75433W15	RES,RK 39RJ 1/4 -CP
R859	06T75433W15	RES,RK 39RJ 1/4 -CP
R860	06T25277Y59	RES,RK 122J 1/16 -CP
R861	06T25277Y73	RES,RK 472J 1/16 -CP
R862	06T25277Y77	RES,RK 682J 1/16 -CP
R863	06T25277Y81	RES,RK 103J 1/16 -CP
R864	06T25277Y81	RES,RK 103J 1/16 -CP
R865	06T25277Y81	RES,RK 103J 1/16 -CP
R866	06T25277Y81	RES,RK 103J 1/16 -CP
R867	06T25277Y77	RES,RK 682J 1/16 -CP
R868	06T25277Y81	RES,RK 103J 1/16 -CP
R869	06T75433W33	RES,RK 221J 1/4 -CP
R870	06T25277Y85	RES,RK 153J 1/16 -CP
R872	06T75433W35	RES,RK 271J 1/4 -CP
R873	06T75433W35	RES,RK 271J 1/4 -CP
R875	06T75433W41	RES,RK 471J 1/4 -CP
R876	06S35084Y28	RES,RK 182F 1/8 -CP
R877	06S35084Y34	RES,RK 562F 1/8 -CP
R878	06T75431W99	RES,RK 473J 1/10 -CP
R879	06T75431W83	RES,RK 103J 1/10 -CP
R881	06T75434W23	RES,RK 5R6J 1/4 -CP
R882	06T75431W83	RES,RK 103J 1/10 -CP
R889	06T75432W50	RES,RK JUMPER1/10-CP
RA506	06S45591W06	RES,ARY MNR102J 4-CP
RA507	06S45591W06	RES,ARY MNR102J 4-CP
RA508	06S45591W06	RES,ARY MNR102J 4-CP
RA510	06S45591W06	RES,ARY MNR102J 4-CP
RA511	06S45591W06	RES,ARY MNR102J 4-CP

Symbol No.	Part No.	Description
Connectors		
CB301	09T25436Y07	WTB,53253-0710 -DB
CB330	09T25436Y03	WTB,53253-0310 -DB
CB331	09T25436Y03	WTB,53253-0310 -DB
CB501	09T45434W15	FFC,52271-1590 -ED
CB601	09T25436Y02	WTB,53253-0210 -DB
CB802	09T25436Y05	WTB,53253-0510 -DB
CB803	09T25436Y03	WTB,53253-0310 -DB
CH101	09T25684Y22	FFC,SLW22R-1C7 -DB
Front P.W.Board		
IC's		
IC401	51T85152W01	LC75883 -QT
IC402	51T15186Y01	LC75823W -QT
IC403	51T25419Y01	RS-181 -NE6
Transistors		
Q405	48T63788F04	TR ,CP.2SD1328-T -TX
Q406	48T63788F04	TR ,CP.2SD1328-T -TX
Q408	48T64222F02	TR ,UN2212 22-22 -TX
Q409	48T64222F01	TR ,UN2211 10-10 -TX
Q410	48T64222F01	TR ,UN2211 10-10 -TX
Diodes		
D401	48T81063F01	DIO,CP.MA159 / TX-CP
D402	48T94471F01	TR ,IMN10
D405	48T85357W01	DIO,1PS226 -CP
D406	48T85357W01	DIO,1PS226 -CP
D407	48T85357W01	DIO,1PS226 -CP
D408	48T85357W01	DIO,1PS226 -CP
D409	48T85357W01	DIO,1PS226 -CP
LED's		
LD416	48T25583Y01	LED,BLU KB1111CE -CP
LD417	48T25534Y02	LED,RED BR1111C -CP
LD418	48T25534Y06	LED,YEL PY1111C -CP
LD419	48T25534Y03	LED,AMB AA1111C -CP
LD420	48T25534Y03	LED,AMB AA1111C -CP
LD421	48T25534Y03	LED,AMB AA1111C -CP

Symbol No.	Part No.	Description
LD422	48T25534Y03	LED,AMB AA1111C -CP
LD423	48T25534Y03	LED,AMB AA1111C -CP
LD424	48T25534Y03	LED,AMB AA1111C -CP
LD425	48T25534Y03	LED,AMB AA1111C -CP
LD426	48T25534Y03	LED,AMB AA1111C -CP
LD427	48T25534Y03	LED,AMB AA1111C -CP
LD428	48T25534Y03	LED,AMB AA1111C -CP
LD429	48T25534Y03	LED,AMB AA1111C -CP
LD430	48T25534Y03	LED,AMB AA1111C -CP
LD431	48T25534Y03	LED,AMB AA1111C -CP
LD432	48T25534Y03	LED,AMB AA1111C -CP
LD433	48T25534Y03	LED,AMB AA1111C -CP
LD434	48T25534Y01	LED,GRN BG1111C -CP
LD435	48T25534Y01	LED,GRN BG1111C -CP
LD436	48T25534Y01	LED,GRN BG1111C -CP
LD437	48T25534Y01	LED,GRN BG1111C -CP
LD438	48T25534Y01	LED,GRN BG1111C -CP
LD439	48T25534Y01	LED,GRN BG1111C -CP
LD440	48T25534Y01	LED,GRN BG1111C -CP
LD441	48T25534Y01	LED,GRN BG1111C -CP
LD450	48T65477W03	LED,SML-010PTT87 -CP(GRN)
LD451	48T65477W03	LED,SML-010PTT87 -CP(GRN)
LD452	48T65477W03	LED,SML-010PTT87 -CP(GRN)
LD453	48T65477W03	LED,SML-010PTT87 -CP(GRN)
LD454	48T65477W03	LED,SML-010PTT87 -CP(GRN)
LD455	48T65477W03	LED,SML-010PTT87 -CP(GRN)
LD456	48T65477W03	LED,SML-010PTT87 -CP(GRN)
LD457	48T15110Y02	LED,A/G AABG1211C-CP
LD458	48T25534Y08	LED,AMB FA1111C -CP
LD470	48T15110Y02	LED,A/G AABG1211C-CP
LD471	48T15110Y02	LED,A/G AABG1211C-CP
LD472	48T15110Y02	LED,A/G AABG1211C-CP
LD473	48T15110Y02	LED,A/G AABG1211C-CP
LD474	48T15110Y02	LED,A/G AABG1211C-CP
LD475	48T15110Y02	LED,A/G AABG1211C-CP
LD476	48T15110Y02	LED,A/G AABG1211C-CP
LD477	48T15110Y02	LED,A/G AABG1211C-CP
LD478	48T15110Y02	LED,A/G AABG1211C-CP
LD479	48T15110Y02	LED,A/G AABG1211C-CP
LD480	48T15110Y02	LED,A/G AABG1211C-CP
LD481	48T15110Y02	LED,A/G AABG1211C-CP

Switches

Symbol No.	Part No.	Description
SW402	40T55656W06	SW,TACT SKQMAJ001-E2(AF)
SW403	40T55656W06	SW,TACT SKQMAJ001-E2(FWD/UP)
SW404	40T55656W06	SW,TACT SKQMAJ001-E2 (PLAY/PAUSE/TUNE/A.ME)

Symbol No.	Part No.	Description
SW405	40T55656W06	SW,TACT SKQMAJ001-E2(DN/BWD)
SW407	40T55656W06	SW,TACT SKQMAJ001-E2(PWR/SOURCE)
SW408	40T55656W06	SW,TACT SKQMAJ001-E2(T.S.M./BAND)
SW409	40T55656W06	SW,TACT SKQMAJ001-E2(BBE/T.INFO)
SW410	40T55656W06	SW,TACT SKQMAJ001-E2(DISP/INTLZ)
SW411	40T55656W06	SW,TACT SKQMAJ001-E2(TITLE)
SW412	40T55656W06	SW,TACT SKQMAJ001-E2(F/A.PROC)
SW413	40T55656W06	SW,TACT SKQMAJ001-E2(1/R.TEXT)
SW414	40T55656W06	SW,TACT SKQMAJ001-E2(2/PTY)
SW415	40T55656W06	SW,TACT SKQMAJ001-E2(3/P.PTY)
SW416	40T55656W06	SW,TACT SKQMAJ001-E2(4/M.I.X.)
SW417	40T55656W06	SW,TACT SKQMAJ001-E2(5/RPT)
SW418	40T55656W06	SW,TACT SKQMAJ001-E2(6/SCAN)
SW419	40T55656W06	SW,TACT SKQMAJ001-E2(EJECT)
SW420	40T55656W06	SW,TACT SKQMAJ001-E2(ANGLE UP)
SW421	40T55656W06	SW,TACT SKQMAJ001-E2(ANGLE DOWN)
SW424	40T55656W06	SW,TACT SKQMAJ001-E2(RESET)

Inverter

Symbol No.	Part No.	Description
CB401	01T95281W08	ASSY,INV 7852R0

Capacitors

Symbol No.	Part No.	Description
C401	08S53332F62	CAP,CP .473-K-B -CP
C402	08S82122F61	CAP,CER.102J-CH1H-CP
C403	08T15399W03	CAP,CER.473K-B1H -CP
C404	08T15399W03	CAP,CER.473K-B1H -CP
C405	08S53332F62	CAP,CP .473-K-B -CP
C406	08T15399W03	CAP,CER.473K-B1H -CP
C407	08T15399W03	CAP,CER.473K-B1H -CP
C408	08S82122F57	CAP,CER.681J-CH1H-CP
C409	08S35374W01	CAP,CER 104K-B1E-CP
C410	08S82122F61	CAP,CER.102J-CH1H-CP
C411	08S82122F61	CAP,CER.102J-CH1H-CP
C412	08S82122F61	CAP,CER.102J-CH1H-CP
C413	08S82122F49	CAP,CER.331J-CH1H-CP
C414	08S82122F49	CAP,CER.331J-CH1H-CP
E402	23S55311W42	CAP,TAN.4R7-1D-B -CP

Resistors

Symbol No.	Part No.	Description
R400	06T75433W75	RES,RK 123J 1/4 -CP
R401	06T75431W59	RES,RK 102J 1/10 -CP
R402	06T75431W59	RES,RK 102J 1/10 -CP
R403	06T75431W59	RES,RK 102J 1/10 -CP
R404	06T75431W59	RES,RK 102J 1/10 -CP

Symbol No.	Part No.	Description
R405	06T75431W47	RES,RK 331J 1/10 -CP
R406	06T75431W59	RES,RK 102J 1/10 -CP
R407	06T75431W59	RES,RK 102J 1/10 -CP
R408	06T75434W22	RES,RK 2R2J 1/4 -CP
R418	06T75431W98	RES,RK 433J 1/10 -CP
R423	06T75431W59	RES,RK 102J 1/10 -CP
R424	06T75431W98	RES,RK 433J 1/10 -CP
R428	06T75431W59	RES,RK 102J 1/10 -CP
R429	06T75431W59	RES,RK 102J 1/10 -CP
R430	06T75431W59	RES,RK 102J 1/10 -CP
R431	06T75431W59	RES,RK 102J 1/10 -CP
R432	06T75431W59	RES,RK 102J 1/10 -CP
R433	06T75431W59	RES,RK 102J 1/10 -CP
R434	06T75431W59	RES,RK 102J 1/10 -CP
R435	06T75431W59	RES,RK 102J 1/10 -CP
R436	06T75431W59	RES,RK 102J 1/10 -CP
R437	06T75431W59	RES,RK 102J 1/10 -CP
R438	06T75433W28	RES,RK 131J 1/4 -CP
R439	06T75433W29	RES,RK 151J 1/4 -CP
R440	06T75433W28	RES,RK 131J 1/4 -CP
R441	06T75433W29	RES,RK 151J 1/4 -CP
R442	06T75433W29	RES,RK 151J 1/4 -CP
R443	06T75433W28	RES,RK 131J 1/4 -CP
R444	06T75433W29	RES,RK 151J 1/4 -CP
R445	06T75433W28	RES,RK 131J 1/4 -CP
R448	06T75433W59	RES,RK 272J 1/4 -CP
R449	06T75433W44	RES,RK 621J 1/4 -CP
R451	06T75431W67	RES,RK 222J 1/10 -CP
R455	06T75431W67	RES,RK 222J 1/10 -CP
R456	06T75433W52	RES,RK 132J 1/4 -CP
R458	06T75431W35	RES,RK 101J 1/10 -CP
R459	06T75431W75	RES,RK 472J 1/10 -CP
R464	06T75432W08	RES,RK 104J 1/10 -CP
R465	06T75433W44	RES,RK 621J 1/4 -CP
R470	06T75431W83	RES,RK 103J 1/10 -CP
R471	06T75433W38	RES,RK 361J 1/4 -CP
R472	06T75433W31	RES,RK 181J 1/4 -CP
R473	06T75433W38	RES,RK 361J 1/4 -CP
R474	06T75433W31	RES,RK 181J 1/4 -CP
R475	06T75433W38	RES,RK 361J 1/4 -CP
R476	06T75433W31	RES,RK 181J 1/4 -CP
RA401	06S45591W06	RES,ARY MNR102J 4-CP
RA402	06S45591W06	RES,ARY MNR102J 4-CP

Symbol No.	Part No.	Description
DC/DC Converter P.W.Board		
IC's		
IC901	51T80251F01	NJM78L09A -NB
IC902	51T80252F01	NJM79L09A -NB
Transistors		
Q901	48T69176F02	TR ,2SC3421-Y
Q902	48T55057W01	TR,2SD1857-PQ-TV2-RD
Q903	48T55057W01	TR,2SD1857-PQ-TV2-RD
Diodes		
D901	48T85269W02	DIO,SHT SB040 -H5
D902	48T85269W02	DIO,SHT SB040 -H5
D903	48T85269W02	DIO,SHT SB040 -H5
D904	48T85269W02	DIO,SHT SB040 -H5
ZD901	48T25766W25	DIO,ZEN.HZS 9C2L -R5
Coil		
L901	24T95399W21	IND,RCH-855 471K +
Transfomer		
T901	25T95401W01	TRANS,LC-10 -DB
Capacitors		
C902	08T55390W22	CAP,TF 273J-1H -R5
E901	23T45365W05	CAP,SME 101-1E -R2
E902	23T45365W06	CAP,SME 33R-1V -R2
E903	23T45365W02	CAP,SME 101-1A -R2
E904	23T45365W05	CAP,SME 101-1E -R2
E905	23T45365W05	CAP,SME 101-1E -R2
E906	23T45365W02	CAP,SME 101-1A -R2
E907	23T45365W02	CAP,SME 101-1A -R2
Resistors		
R901	06T75433W33	RES,RK 221J 1/4 -CP
R902	06T75434W17	RES,RK 624J 1/4 -CP
R903	06T75432W30	RES,RK 824J 1/10 -CP

Symbol No.	Part No.	Description
R918	06T75433W69	RES,RK 682J 1/4 -CP
R919	06T75432W27	RES,RK 624J 1/10 -CP
R920	06T75432W27	RES,RK 624J 1/10 -CP
Connector		
CB911	09T25436Y08	WTB,53253-0810 -DB
DP-S Main P.W.Board		
IC's		
IC101	51T25729Y03	MN662771AA5 -QT
IC102	51T35372Y01	AN8882SB-E1 -SEA
IC103	51T25503Y01	BA5985FM-E2 -SEA
IC104	51T35130Y01	TC74HC08AF-EL -SE6
IC201	51T11054W02	NJM78L05UA-TE1 -NE2
IC203	51T16025W01	IC,NJM2100M-TE3-SE03
Transistors		
Q101	48T80611F01	CP.2SB1132-QR-101-E3
Q102	48T73888F08	TR ,CP.FMG1-99
Q103	48T73888F08	TR ,CP.FMG1-99
Q105	48T73888F12	TR ,CP.FMC2-99
Q106	48T94875F06	DTB,CP-113ZK-96
Q107	48T94606F03	TR,DTC124EUA-T106-CP
Diode		
D101	48T81063F01	DIO,CP.MA159 / TX-CP
Crystals		
CL101	91T75576W08	OSC,CER EF0JM1695-E2
CL102	91T75576W01	OSC,CER EF0S4194E-E5
Thermistor		
TH101	48T25250Y01	TMT,ERTJ1VV104J -CP

Symbol No.	Part No.	Description
Capacitors		
C101	08S65128F78	CAP,CER.223K-B1H -CP
C102	08S65128F90	CAP,CER 473K-B1H -CP
C104	08S65128F78	CAP,CER.223K-B1H -CP
C105	08S65128F64	CAP,CER.392K-B1H -CP
C106	08T15349Y01	CAP,CER 105K-B1A -CP
C108	08S65128F79	CAP,CER.273K-B1H -CP
C109	08S65128F79	CAP,CER.273K-B1H -CP
C110	08S65128F68	CAP,CER.822K-B1H -CP
C111	08S65128F61	CAP,CER.222K-B1H -CP
C112	08S12453W04	CAP,CER 331G-CH1H-CP
C114	08S65128F67	CAP,CER.682K-B1H -CP
C115	08S65128F78	CAP,CER.223K-B1H -CP
C120	08S82122F55	CAP,CER.561J-CH1H-CP
C121	08S35374W01	CAP,CER 104K-B1E-CP
C122	08S82122F42	CAP,CER.161J-CH1H-CP
C123	08S82122F33	CAP,CER.68RJ-CH1H-CP
C124	08S65128F78	CAP,CER.223K-B1H -CP
C125	08S65128F66	CAP,CER.562K-B1H -CP
C126	08S35374W01	CAP,CER 104K-B1E-CP
C127	08S35374W01	CAP,CER 104K-B1E-CP
C129	08S65128F60	CAP,CER.182K-B1H -CP
C131	08S82122F37	CAP,CER.101J-CH1H-CP
C133	08S35374W01	CAP,CER 104K-B1E-CP
C134	08S65128F78	CAP,CER.223K-B1H -CP
C135	08S65128F78	CAP,CER.223K-B1H -CP
C136	08S65128F78	CAP,CER.223K-B1H -CP
C137	08S35374W01	CAP,CER 104K-B1E-CP
C138	08T55487W02	CAP,CER.224K-B1C -CP
C139	08S65128F78	CAP,CER.223K-B1H -CP
C140	08S65128F78	CAP,CER.223K-B1H -CP
C141	08S35374W01	CAP,CER 104K-B1E-CP
C146	08S35374W01	CAP,CER 104K-B1E-CP
C147	08S65128F78	CAP,CER.223K-B1H -CP
C148	08S65128F57	CAP,CER.102K-B1H -CP
C149	08S65128F41	CAP,CER.181J-SL1H-CP
C150	08S65128F59	CAP,CER.152K-B1H -CP
C151	08S65128F69	CAP,CER.103K-B1H -CP
C153	08S35374W01	CAP,CER 104K-B1E-CP
C201	08S82122F59	CAP,CER.821J-CH1H-CP
C202	08S82122F59	CAP,CER.821J-CH1H-CP
C203	08S82122F47	CAP,CER.271J-CH1H-CP
C204	08S82122F47	CAP,CER.271J-CH1H-CP
C207	08S82122F41	CAP,CER.151J-CH1H-CP
C208	08S82122F41	CAP,CER.151J-CH1H-CP
E101	23S55311W35	CAP,TAN 10R-1C-B -CP
E102	23T85373W03	CAP,ECAR 47R-05-C-E5
E103	23T85373W03	CAP,ECAR 47R-05-C-E5

Symbol No.	Part No.	Description
E104	23T85373W06	CAP,RA 4R7-1V-B -E5
E106	23T85373W05	CAP,ECAR 10R-1C-C-E5
E107	23S55311W35	CAP,TAN 10R-1C-B -CP
E108	23S55311W35	CAP,TAN 10R-1C-B -CP
E110	23S55311W35	CAP,TAN 10R-1C-B -CP
E111	23T85373W03	CAP,ECAR 47R-05-C-E5
E112	23T85373W04	CAP,RA 22R-0J-B -E5
E113	23T85373W05	CAP,ECAR 10R-1C-C-E5
E201	23T85373W04	CAP,RA 22R-0J-B -E5
E202	23T85373W04	CAP,RA 22R-0J-B -E5
E203	23T85373W04	CAP,RA 22R-0J-B -E5
Resistors		
R101	06T25277Y82	RES,RK 113J 1/16 -CP
R102	06T25279Y04	RES,RK JUMPER1/16-CP
R103	06T25279Y04	RES,RK JUMPER1/16-CP
R104	06T25277Y82	RES,RK 113J 1/16 -CP
R105	06T75433W01	RES,RK 10RJ 1/4 -CP
R106	06T25277Y97	RES,RK 473J 1/16 -CP
R107	06T75433W03	RES,RK 12RJ 1/4 -CP
R108	06T25277Y93	RES,RK 333J 1/16 -CP
R109	06T25277Y97	RES,RK 473J 1/16 -CP
R110	06T25277Y99	RES,RK 563J 1/16 -CP
R111	06T25279Y04	RES,RK JUMPER1/16-CP
R112	06T25277Y81	RES,RK 103J 1/16 -CP
R113	06T25277Y99	RES,RK 563J 1/16 -CP
R114	06T25278Y14	RES,RK 224J 1/16 -CP
R115	06T25278Y15	RES,RK 244J 1/16 -CP
R116	06T25277Y97	RES,RK 473J 1/16 -CP
R120	06T25277Y74	RES,RK 512J 1/16 -CP
R121	06T25277Y88	RES,RK 203J 1/16 -CP
R122	06T25277Y81	RES,RK 103J 1/16 -CP
R123	06T25277Y87	RES,RK 183J 1/16 -CP
R124	06T25277Y33	RES,RK 101J 1/16 -CP
R125	06T25277Y97	RES,RK 473J 1/16 -CP
R126	06T25277Y92	RES,RK 303J 1/16 -CP
R127	06T25277Y98	RES,RK 513J 1/16 -CP
R128	06T25277Y67	RES,RK 272J 1/16 -CP
R129	06T25278Y20	RES,RK 394J 1/16 -CP
R130	06T25277Y97	RES,RK 473J 1/16 -CP
R131	06T25279Y04	RES,RK JUMPER1/16-CP
R132	06T25279Y04	RES,RK JUMPER1/16-CP
R133	06T25277Y57	RES,RK 102J 1/16 -CP
R134	06T25277Y65	RES,RK 222J 1/16 -CP
R141	06T25277Y33	RES,RK 101J 1/16 -CP
R149	06T25277Y50	RES,RK 511J 1/16 -CP
R150	06T25278Y20	RES,RK 394J 1/16 -CP
R151	06T25277Y98	RES,RK 513J 1/16 -CP
R152	06T25277Y81	RES,RK 103J 1/16 -CP
R153	06T25277Y93	RES,RK 333J 1/16 -CP
R154	06T25277Y81	RES,RK 103J 1/16 -CP
R155	06T25277Y33	RES,RK 101J 1/16 -CP
R156	06T25277Y33	RES,RK 101J 1/16 -CP
R157	06T25277Y89	RES,RK 223J 1/16 -CP
R158	06T25277Y85	RES,RK 153J 1/16 -CP
R159	06T25277Y81	RES,RK 103J 1/16 -CP
R160	06T25279Y04	RES,RK JUMPER1/16-CP
R161	06T25277Y67	RES,RK 272J 1/16 -CP
R162	06T25278Y14	RES,RK 224J 1/16 -CP
R163	06T25277Y49	RES,RK 471J 1/16 -CP
R164	06T25278Y06	RES,RK 104J 1/16 -CP
R165	06T25279Y01	RES,RK 105J 1/16 -CP
R166	06T25277Y33	RES,RK 101J 1/16 -CP
R167	06T25277Y33	RES,RK 101J 1/16 -CP
R168	06T25277Y33	RES,RK 101J 1/16 -CP
R169	06T25277Y33	RES,RK 101J 1/16 -CP
R170	06T25277Y97	RES,RK 473J 1/16 -CP
R171	06T25279Y04	RES,RK JUMPER1/16-CP
R172	06T25277Y97	RES,RK 473J 1/16 -CP
R173	06T25279Y04	RES,RK JUMPER1/16-CP
R174	06T25277Y93	RES,RK 333J 1/16 -CP
R177	06T25277Y79	RES,RK 822J 1/16 -CP
R178	06T25278Y08	RES,RK 124J 1/16 -CP
R179	06T25277Y33	RES,RK 101J 1/16 -CP
R180	06T25277Y33	RES,RK 101J 1/16 -CP
R181	06T25277Y33	RES,RK 101J 1/16 -CP
R182	06T25277Y33	RES,RK 101J 1/16 -CP
R183	06T25277Y33	RES,RK 101J 1/16 -CP
R184	06T25277Y33	RES,RK 101J 1/16 -CP
R185	06T25277Y33	RES,RK 101J 1/16 -CP
R186	06T25277Y33	RES,RK 101J 1/16 -CP
R187	06T25277Y33	RES,RK 101J 1/16 -CP
R188	06T25277Y33	RES,RK 101J 1/16 -CP
R189	06T25277Y33	RES,RK 101J 1/16 -CP
R190	06T25277Y33	RES,RK 101J 1/16 -CP
R191	06T25277Y97	RES,RK 473J 1/16 -CP
R203	06T75433W78	RES,RK 163J 1/4 -CP
R204	06T75433W78	RES,RK 163J 1/4 -CP
R205	06T75433W57	RES,RK 222J 1/4 -CP
R206	06T75433W57	RES,RK 222J 1/4 -CP
R207	06T75433W77	RES,RK 153J 1/4 -CP
R208	06T75433W77	RES,RK 153J 1/4 -CP
R209	06T75433W50	RES,RK 112J 1/4 -CP
R210	06T75433W50	RES,RK 112J 1/4 -CP
R211	06T75434W07	RES,RK 244J 1/4 -CP
R212	06T75434W07	RES,RK 244J 1/4 -CP

Symbol No.	Part No.	Description
R213	06T75433W17	RES,RK 47RJ 1/4 -CP
R214	06T75433W17	RES,RK 47RJ 1/4 -CP
R217	06T75433W68	RES,RK 622J 1/4 -CP
R218	06T75433W68	RES,RK 622J 1/4 -CP
R219	06T75434W07	RES,RK 244J 1/4 -CP
R220	06T75434W07	RES,RK 244J 1/4 -CP

Connectors

Symbol No.	Part No.	Description
CB101	09T45435W15	FFC,52207-1590 -ED
CB102	09T45435W07	FFC,52207-0790 -E9
CB801	09T45435W22	FFC,52207-2290 -EQ

Miscellaneous

Symbol No.	Part No.	Description
ANT001	01T15513W30	ASSY,ANT CABLE 7865R
CB801	09T35473Y16	WTB,F169B001-16 -DB
CFL401	65T25089Y02	CFL,CTY22P2-93N98
CH401	09T25444Y15	BTB,55323-1511 -B
CH501	01T35001Y01	ASSY,UNIZ0N CONN 52R
CH601	01T25413Y01	ASSY,CONN 2P
DIN802	01T35496Y01	ASSY,DIN 7865R0
ET330	01T35497Y02	ASSY,WIRE RCA7865R0 (R-OUT/SUB.W & FRONT OUT)
JK601	09T95460W01	JAC,HSJ0857-01-1010+
LCD401	65T35461Y01	LCD,WTD-17847H
M601	59T65085W01	MOTOR,LOAD FF-050SK (NOSE MOTOR/7V-370mA)
SW425	40T45670W13	SPL,EC11B15243 -DB (ROTARY ENCODER/MODEÅELOUD)
SW601	40T15494Y01	SW,DETCT SPVG23 -E6 (NOSE CLOSE DET)
SW602	40T15494Y02	SW,DETCT SPVG13 -E6 (NOSE OPEN DET)

DP23S070

Symbol No.	Part No.	Description
HD101	81B31011Y01	PICKUP,EP21A620
M101	01V21600Y50	ASSY,MOTOR-WORM(7V-370mA)
M102	01V21600Y53	ASSY,MOTOR SLED(7V-370mA)
M103	01V21600Y55	ASSY,MOTOR SPINDLE(2V-90mA)
SW1	40T15494Y01	SW,DETCT SPVG23 -E6 (12cm DISC DETECT(EJECT POSITION/RELOAD))
SW2	40T15494Y02	SW,DETCT SPVG13 -E6 (8/12cm DISC DETECT(INSERT/PULL OUT))
SW3	40T15494Y07	SW,DETCT SPVG21 -E6 (8cm DISC DETECT(EJECT POSITION/RELOAD))
SW4	40T15494Y01	SW,DETCT SPVG23 -E6 (DISC CHUCKING END DETECT)
SW105	40T71025F03	SW,DETCT SPPB120(LIMIT)

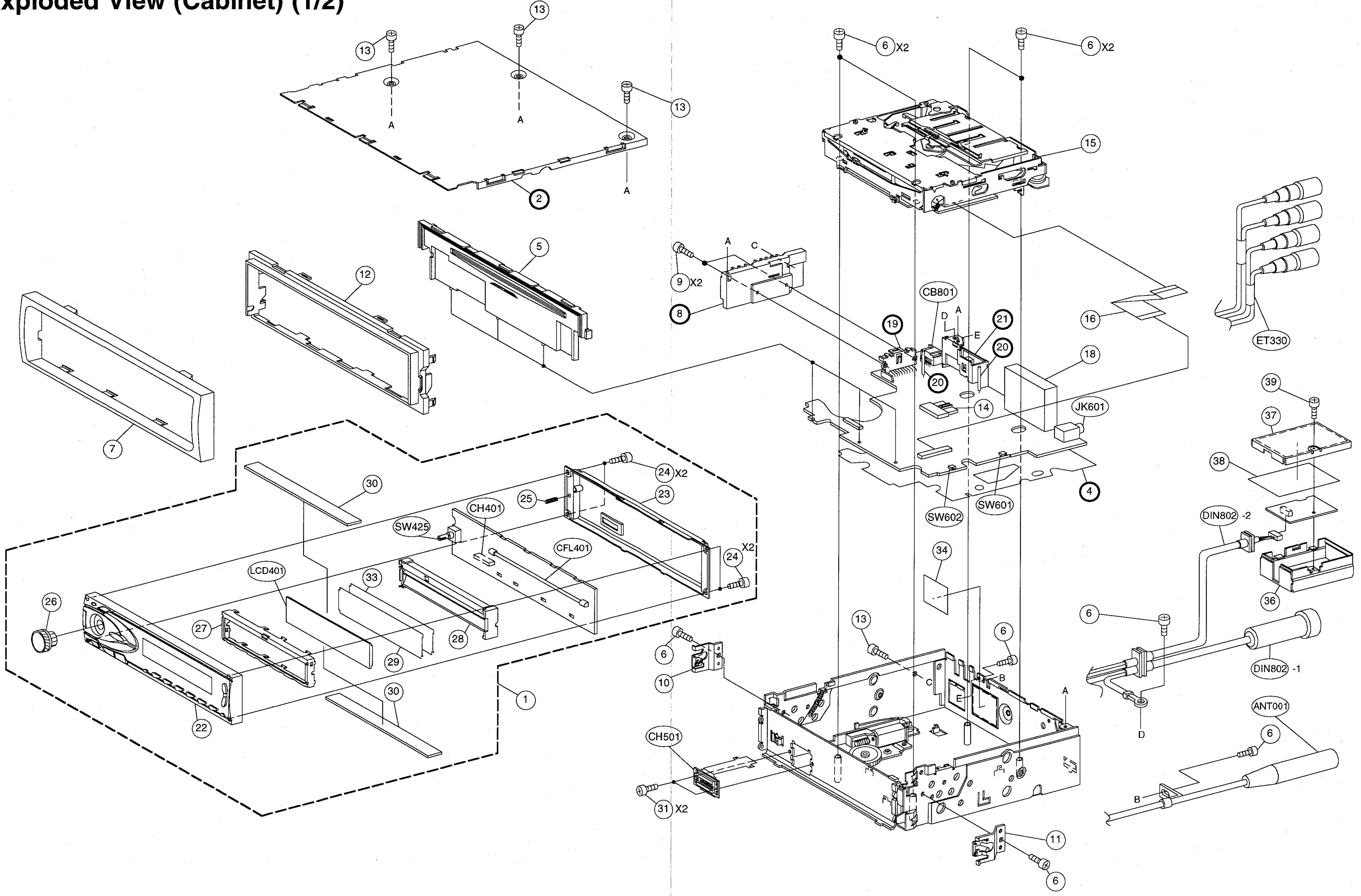
Cabinet Assembly Parts List

NOTE:Parts without part number are not supplied.

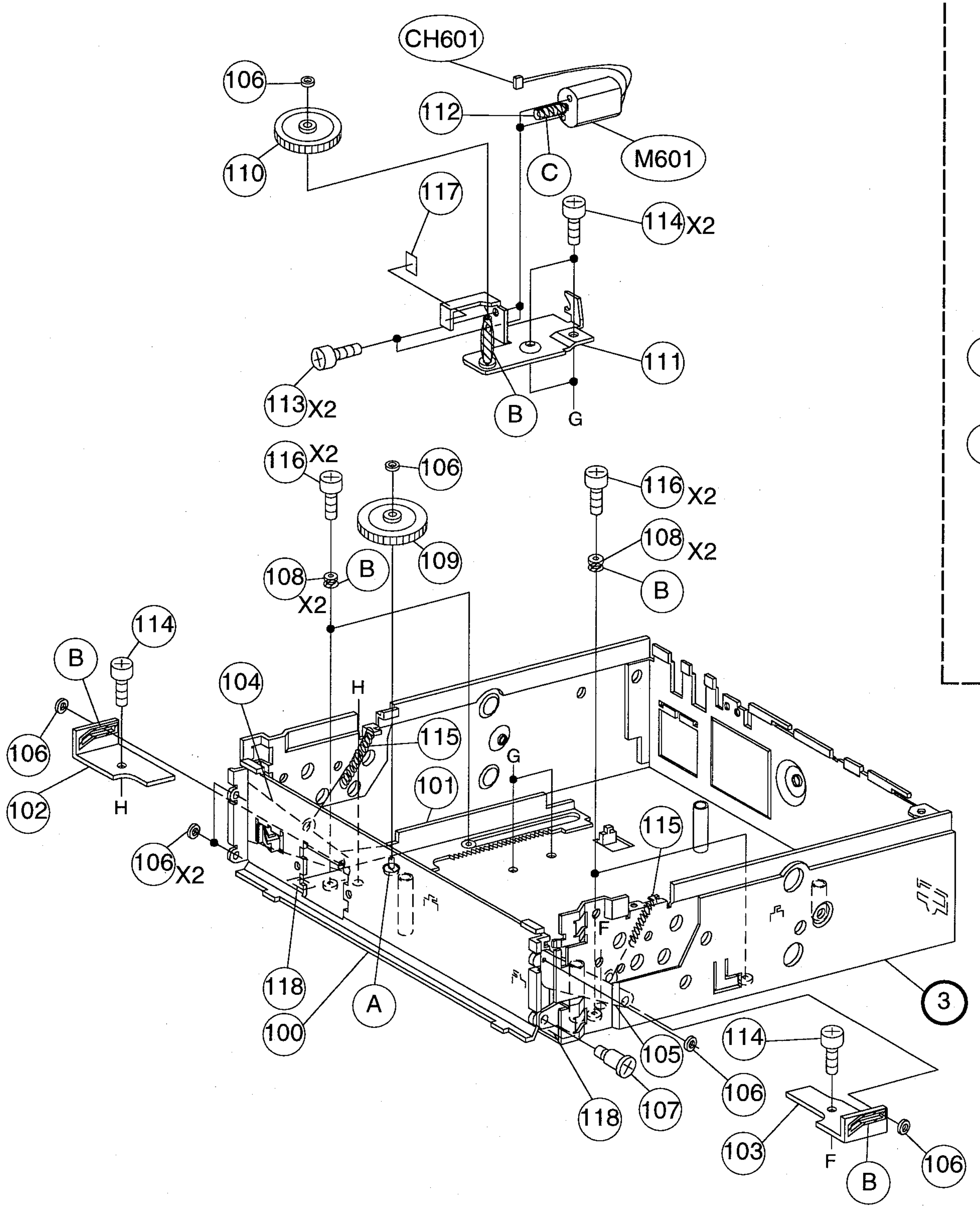
Symbol No.	Index	Part No.	Description
1		01V36400Y92	ASSY,NOSE UNIT 65RO
5		13C21370Y02	NOSE,BASE(CD) ASSY
6		03S44205G07	SCR,T-TITE M2.6X5
7		33C10618Y04	FACE,PLATE
9		03S38013W05	SCR,T-TITE M2.6X16
10		07D91595W01	BKT,SIDE ASSY
11		07D91595W02	BKT,SIDE(R) ASSY
12		13D21372Y01	NOSE,BASE COVER
13		03S71677F02	SCR,T-TITE-B M2.6X6
14		36A70327W01	KNOB,SLIDE
15		81D30307Y01	DP23S070,CD MECH
16		30T25456Y15	SMCD-22X112-BDX6(BL)
18		77B30901Y01	MB4R9030,FM/AM UNIT (TU001)
22		13D31424Y02	NOSE,PIECE ASSY
23		13D31239Y02	NOSE,BOTTOM
24		03S68555F20	SCR,WAVE M1.7X5
25		41A50111W10	SPRING,KNOB
26		36C31240Y02	KNOB,VOL ASSY
27		15B31237Y01	COVER,LCD
28		15C31236Y01	CASE,LCD
29		26A31238Y01	REFLECTOR,SHEET
30		75T85248W09	RUBBER,ELECTRIC
31		03S94385F77	SCR,NYLOK M1.7X3
33		26A31238Y02	REFLECTOR,SHEET(B)
34		14S30726Y22	INS,SHEET
36		15C11509Y01	CASE,DC-DC
37		15B11508Y01	COVER,DC-DC
38		14A20122Y01	INSULATOR,DC-DC
39		03S44205G29	SCR,T-TITE M2.6X6
100		01C21375Y03	ASSY,BKT F BASE
101		07B21380Y01	BKT,SLIDER
102		07B20734Y01	BKT,BASE L
103		07B20734Y02	BKT,BASE R
104		07A21381Y01	BKT,ARM(L)
105		07A21381Y02	BKT,ARM(R)
106		04B41345P54	WASHER,LOCK
107		03A20851Y02	SCR,SLIDER
108		49A22103Y01	ROLLER,SLIDER FRONT
109		44A20248Y01	GEAR,SLIDER
110		44T25192Y01	GEAR,CLUTCH ASSY
111		07C20740Y01	BKT,MOTOR
112		44A90467W02	GEAR,WORM
113		03S68259F23	SCR,P-LOCK M2X3
114		03S94385F13	SCR,NYLOK M2.6X3
115		41A22014Y01	SPRING,EXTENSION
116		03S94385F24	SCREW,NYLOK
117		14S11351Y95	INS,CVR 8X6XT0.25
118		75S21219Y48	CUS,RUB(9X4.5XT2)

CDA-7865R

Exploded View (Cabinet) (1/2)


13
13
13
13
A
A
A
2
5
12
7
30
24 X2
23
25
CH401
SW425
CFL401
24 X2
LCD401
33
26
27
28
29
22
30
1
6 X2
6 X2
15
9 X2
8
A
C
CB801
19
21
20
20
D
A
E
16
18
14
JK601
4
SW602
SW601
ET330
39
37
38
DIN802 -2
36
34
13
6
6
10
C
B
E
A
DIN802 -1
6
D
ANT001
6
B
CH501
31 X2
11
6

Exploded View (Cabinet) (2/2)


CH601
106
112
M601
110
C
117
114 X2
111
113 X2
B
G
116 X2
106
116 X2
109
108 X2
B
108 X2
B
114
B
104
H
115
106
102
H
G
101
115
106 X2
F
118
A
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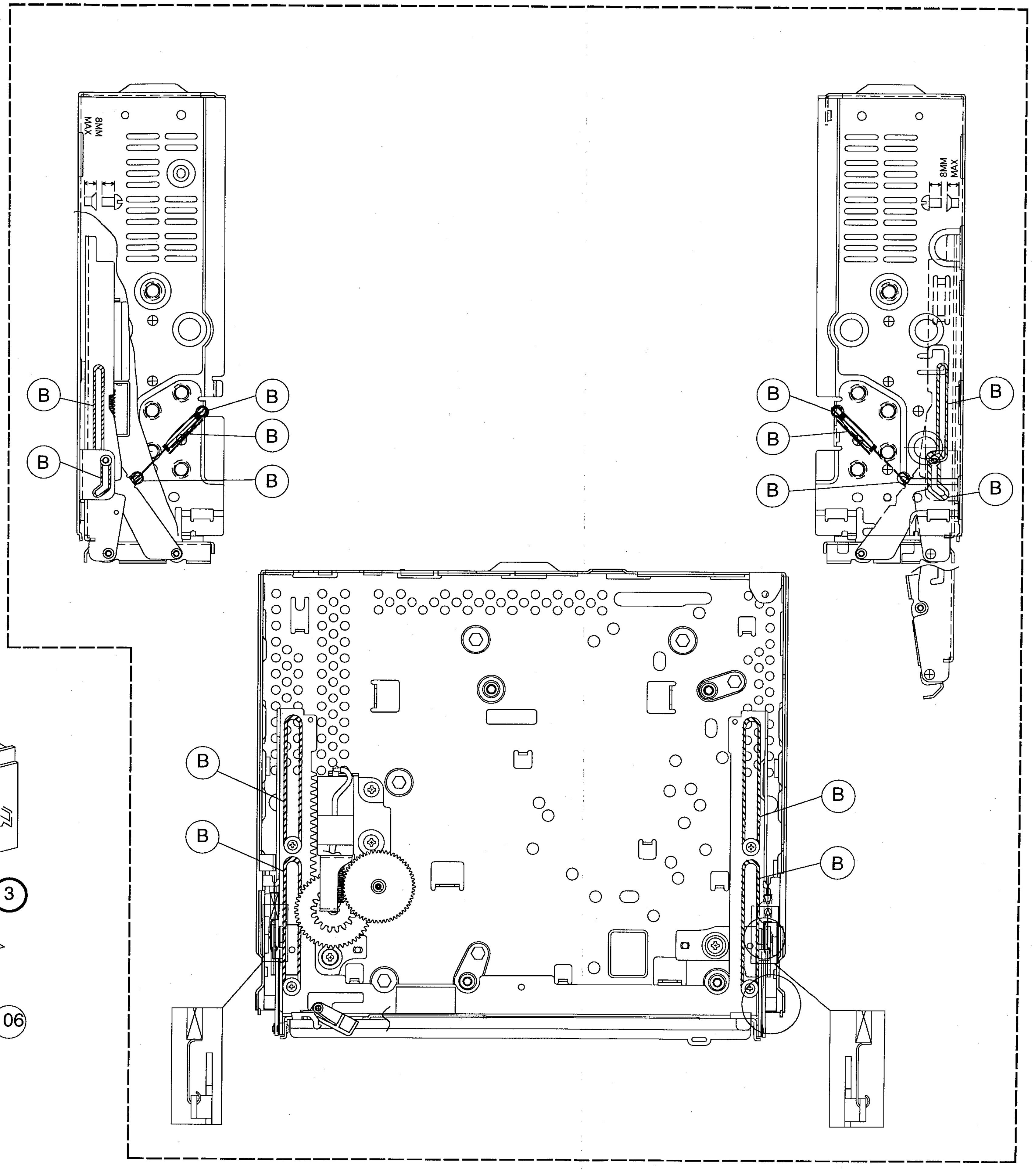
106
118
107
103
F
B
106

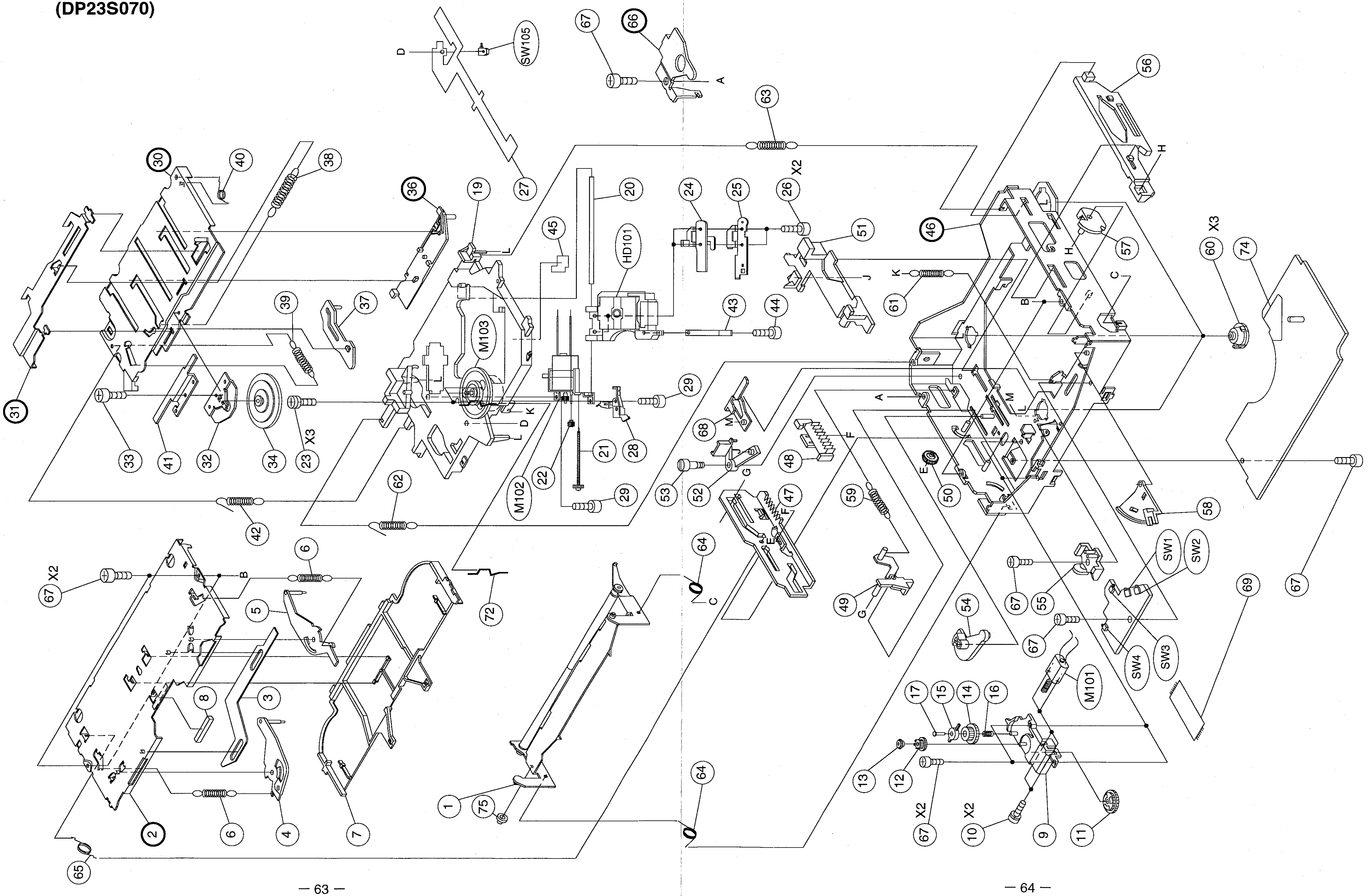

8MM MAX
B
B
B
B
B
8MM MAX
B
B
B
B
B
B
B
B
B

▨ ....point of GREASE applied.

Ⓐ	GREASE, FG-53C (11S20853Y01)
Ⓑ	GREASE, E PASTE (11S42419J09)
Ⓒ	GREASE SILICON (11S490487)

Exploded View (CD Deck Mechanism)

(DP23S070)


D
SW105
27
67
66
A
63
56
H
30
40
38
36
19
20
24
25
26 X2
51
46
57
H
60 X3
74
J
K
61
B
C
31
39
37
45
HD101
M103
43
44
A
M
L
29
28
68
M
33
41
32
34
23 X3
D
K
L
21
22
M102
29
53
52
G
48
F
E
50
58
62
42
47
F
59
64
C
6
67 X2
B
5
72
55
67
SW1
SW2
69
67
54
67
SW4
SW3
8
3
M101
17
15
14
16
49
G
1
75
64
13
12
2
6
4
7
67 X2
10 X2
9
11
65

CD Deck Mechanism Assembly Parts List

NOTE:Parts without part number are not supplied.

Symbol No.	Index	Part No.	Description
1		01V21600Y47	ASSY,ARM GUIDE
3		45B11564Y01	LEVER,LINK-TOP
4		45B11595Y01	LEVER,DISC(R)
5		45B11596Y01	LEVER,DISC(L)
6		41B11613Y02	SPRING,PULL
7		15D11588Y01	GUIDE,TOP DPS
8		75A21286Y01	CUSHION,CLAMPER DP-S
9		07C11584Y01	BKT,MOTOR LOAD
10		03S40014G07	SCR,MCH M2X4
11		44B11578Y01	GEAR,(A)
12		44B11579Y01	GEAR,(B)
13		44B11580Y01	GEAR,(C)
14		44B11582Y01	GEAR,(E)
15		15A11587Y01	HOLDER,CLUCH
16		41A11612Y01	SPRING,COMP
17		47A11571Y01	SHAFT,CLUTCH
19		27D11602Y01	CHASSIS,PICKUP
20		47A11575Y01	SHAFT,PICK
21		01V21600Y54	ASSY,SHAFT SCREW
22		44A70590W04	GEAR,MIDDLE
23		03S72235F96	SCR,MCH M1.7X3.5(SW)
24		07B11623Y01	BKT,SPRING NUT
25		41A11606Y01	SPRING,NUT
26		03S94385F18	SCR,NYLON M2X3.5
27		84T25102Y01	PANEL,FPC CONT
28		41B11566Y01	SPRING,SHAFT
29		03S70494F13	SCR,P-TITE M2X6 BLK
32		07A11565Y01	PLATE,CLAMP
33		03S94385F02	SCR,NYLOK M1.7X3
34		43A30262Y01	TABLE,CLAMPER-R
37		45A11599Y01	LEVER,ACTUATOR
38		41B11613Y03	SPRING,PULL
39		41B11613Y05	SPRING,LEV-ACT
40		41A11609Y01	SPRING,LEVER
41		41B30747Y01	SPRING,PLATE
42		41B11613Y01	SPRING,PULL
43		41A11040Y01	SPRING,SLED-HOE
44		03S72235F79	SCR,MCH M1.4X3
45		43A21240Y01	SHEET,FPC PICK
47		45B11560Y01	SLIDER,LOAD
48		44B11586Y01	RACK
49		45A11601Y01	LEVER,TRIGER
50		44B11581Y01	GEAR,(D)
51		45B11594Y01	SLIDER,LOCK(L)
52		45A11592Y01	ARM,LOCK(L2)
53		03A11574Y01	SCREW,LOCK
54		45B11591Y01	ARM,LOCK(L1)
55		07A11585Y01	BKT,MOTOR WIRE
56		45B11593Y01	SLIDER,LOCK(R)
57		45B11607Y01	ARM,LOCK(R)
58		45A11597Y01	LEVER,SW
59		41B11613Y04	SPRING,TRIGER
60		75C30466Y01	DAMPER,DPS2
61		41B11613Y06	SPRING,PULL
62		41B11613Y07	SPRING,PULL
63		41B11613Y08	SPRING,PULL
64		41A11610Y01	SPRING,ROL
65		41A31894Y01	SPRING,SLIDER
67		03A21791Y01	SCREW,M2X3.5 S-TITE
68		07B20905Y01	BKT,FPC CONT
69		30T15126W15	WIRE,PC JOINT 7P
72		41A21613Y01	SPRING,SPINDOL
74		14A30831Y01	INS,CVR
75		43A31443Y01	ROLLER,ARM DISC (C)